

Northamptonshire County Council.

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

FOR THE YEAR 1908,

INCLUDING A

Summary of the Annual Reports of the District
Medical Officers of Health,

together with Appendices relating to the Health Visitor, and to the
Medical Inspection of Children in Public Elementary Schools,

BY

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County Medical Officer of Health.

KETTERING :

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NORTHAMPTONSHIRE COUNTY COUNCIL.

Annual Report of the Medical Officer of Health, FOR THE YEAR 1908.

I HEREWITH have the honour to present the Twelfth Annual Report of the Medical Officer of Health to the County Council of Northamptonshire, including a summary of the Annual Reports of the Medical Officers of Health for the several Districts within the Administrative County. On this occasion, I have found it useful to append separately, reports relating to the work of the Health Visitor, and of the Medical Inspection of Children in Public Elementary Schools, during the year 1908. In other respects, the general arrangement of the Report follows the lines of its predecessors.

There were seven inquiries held by the Local Government Board during the year 1908 relative to public health matters in the Administrative County, as shewn in the following table :—

Date.	Sanitary District.	Subject.	Amount of Loan.	Result.
April 16th	Wellingborough Rural	Water Supply at Isham	£2,535	Under consideration
„ 22nd	„ Urban	Purposes of Waterworks	£3,650	Sanetioned
May 5th	„ Rural	Sewerage and Sewage Disposal at Wilby ...	£900	Sanctioned
July 1st	Daventry Rural ...	Sewerage and Sewage Disposal at Staverton	£1,150	Referred back
„ 24th	Irthlingborough Urban	Water Supply	£579, and £800	Referred back
Oct. 24th	Wellingborough Rural	Cemetery purposes at Wollaston ...	£500	Sanctioned
Dec. 4th	„ Urban	(i.) Sewerage ... (ii.) Water Supply ...	£150 (i) £530 (ii)	Sanctioned Under consideration

In regard to some of these matters, it is a cause for satisfaction that the long delay in carrying out a scheme of sewage disposal at Wilby is coming to an end ; it will be remembered that the scheme designed in 1902 had to be held over until the Local Government Board were satisfied that no further loan would be required for the extension of the water-works at that place, and that a fresh scheme had to be prepared after the original one had failed to satisfy the Board. There cannot be any question as to the need of a suitable water-supply being provided for Isham, and, after much consideration of the suggestions of the Local Government Board on the first scheme submitted to them, there appears now to be fair prospect of sanction being given to an amended scheme in the near future. It is much to be regretted that the difficulties of the Irthlingborough Urban District Council in adding to the volume of their water supply reserve have not been overcome as yet, and I hope that their efforts may meet with success at an early date. The additional loans asked for by the Wellingborough Urban District Council have been in respect mainly of their Bushfield water-works, in connection with the softening and filtering systems, and for the extension of water mains.

Owing to various causes, the work of dealing with **River and Stream Pollution** in the County has been less extensive during 1908 than in previous years, but it has followed on lines already laid down. The scheme for the disposal of sewage at Weedon in the **DAVENTRY RURAL DISTRICT** has not been put into execution yet, as it still awaits the approval of the Local Government Board ; the plans have been sent to that Board, however, and it is hoped that an inquiry for sanction to borrow money for the purpose of carrying out the scheme may be held at an early date. In the meantime, the Public Health Committee of the County Council consented during 1908 to suspensions of the operation

of the Order made against the District Council, pending the aforesaid Inquiry. The work of reconstruction of the sewage disposal works of the KETTERING URBAN DISTRICT has proceeded steadily throughout the year, though difficulties occurred from time to time with regard to the delivery of slag for the construction of the filter-beds, and the progress made from month to month was rendered somewhat unequal in consequence. Some preliminary observations which I made of effluents from some of the partially constructed filter-beds were of a not unfavourable character; but it cannot be supposed that the completion of these works is awaited without anxiety, or that the final satisfactory results in regard to the Ise Brook will be otherwise than heartily welcomed. During the current year, observations as to the progress of reconstruction of these works, and the character of the resulting effluents, will continue to be made. Considerable attention has been paid during the year to the needs of certain parishes in the THRAPSTON RURAL DISTRICT. It is hoped that the negotiations for the acquisition of land necessary for the purpose of schemes of sewage disposal at Chelveston and Twywell will soon be completed, and that the schemes prepared for those places will be put in hand without further delay. The attention of the District Council had to be called, moreover, to the need of stricter supervision and attention being given to the working of the scheme of sewage disposal which was instituted recently at Denford. So also, but in much greater degree, was there serious ground for complaint as to the management of the sewage at Thrapston itself. In my report for the year 1907, I drew attention to the fact that pollution of the Three Arch Stream had occurred through Thrapston sewage being allowed to flow thereto, and that the Public Health Committee had made representations to the District Council as to more effective means being provided for preventing such pollution in the future. The District Council not having approved of the

recommendations made, it was necessary to keep Thrapston under rather close observation, and in the course of time the question of prosecuting that Council for recurrent acts of pollution had to be considered. At this point, the District Council decided to take the opinion of an Engineer as to the pollution of the Three Arch Stream, and he recommended, as I had done before, the making a weir across the mouth of the storm-culvert at such a level as to stop the passage of sewage down it until the 12 inch outfall-sewer would be running 8 inches deep. For the purpose of dealing with the silt, which had been deposited in the outfall-sewer and by that much reduced its capacity for the flow of sewage, he further recommended the construction of a catch-pit in the line of the sewer to intercept the heavier portion of the detritus brought down by storm water. These recommendations of the Engineer were eventually carried out and proceedings against the District Council thereby averted; but the future condition of the Three Arch Stream at Thrapston will be noted periodically. Satisfactory works have been carried out by the Surveyor to the District Council for completing the scheme of sewage disposal at Islip, and for dealing with the sewage of the village of Woodford on the septic-tank principle. In other Districts of the County, re-inspections of completed sewage disposal works which have been in operation for one or more years gave generally satisfactory results, and from among these may be more particularly mentioned the works at Mears Ashby in the WELLINGBOROUGH RURAL DISTRICT, in the BOROUGH OF DAVENTRY, and at Bugbrooke in the NORTHAMPTON RURAL DISTRICT. It was necessary, however, to draw attention to the need for closer supervision as to the more regular emptying of the settling-tank at Great Houghton in the HARDINGSTONE RURAL DISTRICT, and for greater watchfulness as to the working of the schemes at both Hardingstone and Yardley Hastings.

The work of **Supervision of the Midwives** has proceeded throughout the year with satisfactory results and without friction. Four cases of Puerperal Fever occurred in the practice of the certified Midwives during the year 1908, as against two cases in each of the two preceding years ; unfortunately two of these proved fatal. The number of confinements attended by the Midwives was 1,815, of which 31 were still-births, as against 1,768 confinements and 42 still-births in the year 1907. The midwives were responsible, therefore, for 37.5 per cent. of the total births in the county for the year, as against 37.1 per cent. in 1907 and 37.6 per cent, in 1906. In respect of these births, the midwives sent for medical aid in 120 instances, or 6.6 per cent. of the total number of cases attended by them, as against the same rate in the year 1907 ; the cases in which medical assistance was requested are shown in the following table of causes due to

LABOUR—						Totals.
Transverse Presentation	...	...	...	...	...	6
Prolonged Labour	...	...	...	...	...	7
Ruptured Perineum	...	...	...	...	...	3
Adherent Placenta	...	...	...	...	...	6
Ante-Partum Hæmorrhage	...	...	...	...	...	2
Post-Partum Hæmorrhage	...	...	...	...	...	1
Eclampsia	...	...	...	...	...	2
Contracted Pelvis	...	...	...	...	...	7
Abortion	...	...	...	...	...	7
Uterine Inertia	...	...	...	...	...	1
Rigid Cervix	...	...	...	...	...	4
Placenta Previa	...	...	...	...	...	1
Occipital Posterior	...	...	...	...	...	2
Retained Membranes	...	...	...	...	...	1
Tedious Labour	...	...	...	...	...	1
Exhaustion	...	...	...	...	...	2

Impacted Breech Presentation	...	...	...	...	...	2
Face Presentation	...	...	...	...	...	3
Apoplexy	...	...	...	...	...	1
Instrumental Labour	...	...	...	...	...	3

LYING-IN—

Phlebitis	...	...	...	...	...	...	2
High Temperature	...	...	...	...	...	...	11

NEWLY BORN CHILD—

Malignant Jaundice	...	...	...	...	...	...	1
Convulsions							3
Ophthalmia (slight)	...	...	...	...	...	...	1
Spina Bifida	...	...	...	...	...	...	1
Premature Birth	...	...	...	...	...	...	19
Debility	...	...	...	...	...	...	9
Weak Heart	...	...	...	...	...	...	1
Still-Births	...	...	...	...	...	...	8
Retention of Urine	...	...	...	...	...	...	2

120

Seven deaths of infants occurred in the practice of the midwives before the arrival of medical assistance, and in the case of three of these inquests were held; in no case was blame attributed to the midwives, even though in one of them the attendant was an uncertified midwife whose practice as such will automatically cease on April 1st, 1910. The number of Certified Midwives practising in the County at the end of the year 1908 was 122, as against 119 in 1907; of 81 other women certified as midwives since the passing of the Act, 7 have died, 37 have removed from the County, 5 have only acted temporarily, 8 are engaged in Public Institutions, and the remaining 24 have no intention of practising at present as midwives. The number of certified midwives

who act also as District Nurses is 31 ; of these, 10 are stated to be not practising midwifery at present. Of the 122 practising midwives, 92 are certified on the ground of having been in bonâ-fide practice as Midwives for twelve months before the passing of the Midwives Act, 1902.

Attention has been given regularly to the condition of the residences of midwives during the year, and several improvements have been secured ; in one case, however, the renovation of the house was effected only after an appeal to the local sanitary authority. The total number of inspections made by the Inspector of Midwives during the year 1908 was 521. Miss Kingham, the Inspector, has reported to me specially as follows :—“ The importance of breast-feeding “ has been particularly brought before the notice of the “ midwives, and, from inquiries made, I find that out of “ 1,784 births occurring in their practice 1,742 were breast- “ fed, and 42 bottle-fed, immediately after birth.”* In this connection it may be stated here that the cards on Infant Feeding are still in considerable demand. Applications for supplies of these cards have been made to me, and 423 copies were sent out during the year of which 250 were to medical practitioners in the county. In addition, 600 copies were distributed as seemed desirable by the Inspector of Midwives. Miss Kingham has reported also as follows :— “ I have been particularly pleased at the diminution in the “ number of still-births, there being 11 less than in the “ previous year ; I feel that in many cases this is due to “ prompt attention given at birth in the matter of resuscita- “ tion, which has been explained thoroughly to the mid- “ wives. I have spent much time in instructing the midwives “ in the use of the clinical thermometer, but find that it is “ impossible to teach about one-fifth of the number owing

* In 1907, the number of breast-fed infants was 1,674, and the number of bottle-fed infants was 52.

“ to their having defective eyesight. Their bags and appli-
 “ ances have been found clean on the whole, but the former
 “ are being discarded gradually for the more sanitary basket
 “ which can be more easily sterilised. Antiseptics are quite
 “ up to the modern standard, but constant supervision has
 “ to be exercised to see that the midwives keep themselves
 “ well supplied. Some prejudice has to be overcome still,
 “ however, in endeavouring to do away with some of the
 “ old-fashioned practices of the older type of midwives,
 “ some of whom, after 30 or 40 years practice, look upon
 “ modern methods as new-fangled notions. The three
 “ County Council scholars are doing good work, one being
 “ at Raunds, where a midwife was much needed.” I may
 mention at this point that two midwifery scholarships were
 awarded early in the year by the Education Committee,
 and both the holders passed the examination of the Central
 Midwives Board, after being trained under the auspices
 of the Association for Promoting the Training and Supply
 of Midwives. Under the terms of their Scholarships, the new
 Midwives are obliged to practise for the first three years
 in the County of Northampton. One other scholar is under-
 going training at the present time.

It is a great satisfaction to me to be able to speak in high
 terms of the work of the **Female Health Visitor** during the
 year. It will be remembered that, as explained in my
 report for the year 1907, the appointment of this Visitor
 is a temporary one only at present, the necessary funds for
 her employment during a period of two years having been
 provided most generously by an anonymous resident in the
 County. An interim report on the work of the Visitor in the
 Wellingborough, Finedon, and Rushden Urban Districts was
 presented to the County Council at its meeting held on the
 29th October, 1908, and was favourably received. I append
 that report now in the belief that a study of it will be helpful

to Medical Officers of Health and others, in considering the advisability of such work being encouraged more generally throughout the County (vide Appendix I.). I am perfectly satisfied myself of the value of the work, and am very hopeful that the services of the present Visitor may be secured permanently ; but I think also that other Districts in the County might follow the example of the Kettering Urban District in themselves appointing a Health Visitor, instead of relying solely on the possible future action of the County Council. In my opinion, the educational value of the results of generous provision for experimental health-visiting in this County can hardly be over-estimated.

In regard to the **Medical Inspection of School Children**, it may be said at least that a great deal of uncertainty has existed in connection with the value to be attached to the procedure, and as to the most efficient manner, with due recognition of the need for administrative economy, in which it could be conducted. The Education (Administrative Provisions) Act, 1907, received the Royal Assent on August 28th of that year, and the Act came into operation on January 1st, 1908. The Official Memorandum, dated 22nd November, 1907, on the medical inspection of children in public elementary schools under section 13 of the aforesaid Act, was issued by the Board of Education as an official interpretation of the terms of that section. This memorandum dealt with the subjects relating to (i.) the Scope and Purpose of the Act, (ii.) Organisation, (iii.), Subsidiary Agencies, (iv.) Character and Degree of Medical Inspection, (v.) Regulations, and (vi.) Amelioration and Physical Improvement. The memorandum commenced with the following expressions which serve to shew the principle of amelioration which is aimed at, and appear to be the most suitable introduction to the first report of the results of medical inspection in this County :—

“ I. The Education (Administrative Provisions) Act, 1907,

“ in so far as it concerns the medical inspection of school
 “ children, is the outcome of a steady movement of public
 “ opinion throughout the entire community. For some years
 “ past evidence has been accumulating that there exists in
 “ certain classes of the English people a somewhat high
 “ degree of physical unfitness which calls for amelioration,
 “ and, as far as possible, for prevention. The Legislature
 “ resolved that to grapple effectively with this problem, or at
 “ least part of it, it was necessary first to improve the health
 “ conditions, both personal and in regard to environment,
 “ of the children of the nation. A consideration of the
 “ gravity of the need led to the conclusion that medical
 “ inspection of school children is not only reasonable but
 “ necessary as a first practical step towards remedy. Without
 “ such inspection we not only lack data, but we fail to begin
 “ at the beginning in any measure of reform. The reason-
 “ ableness of such inspection, if it is conducted on sensible
 “ lines leading to an improvement of the surroundings and
 “ physical life of the children, must become evident both to
 “ their parents and to the nation as a whole.” This memor-
 andum was followed by an official circular, dated January
 23rd, 1908, and addressed to local education authorities.
 Accompanying it was a schedule of medical inspection which
 had been drawn up by the Board of Education, and intended
 to give more definite guidance as regards the details of the
 work of medical inspection than was given in the memorandum
 of November, 1907. In the meantime, at the request of the
 General Purposes Committee of the Education Committee,
 I put before them, on January 4th, 1908, several points for
 consideration relating to the proposed inspection of children
 in public elementary schools. These included (a) time
 allowance for each examination, (b) an estimate of the total
 number of inspections required, (c) the extent of each examina-
 tion, (d) cost of examinations, and (e) by whom the examina-
 tions should be made. These points were further considered

by the Committee on February 1st, 1908, and it was decided subsequently (i.) that one or more whole-time School Medical Officers should be appointed to work, as regards the schools to be visited, and the number of children to be inspected therein, under the direction of the Education Department ; (ii.) that the Medical Officer of Health for the County should be appointed the Reporting Officer to the Education Committee, the School Medical Officer or Officers being responsible for the grouping of the cards, and the recording of general results for the purposes of the Annual and Special Reports which the County Medical Officer of Health might have to make from time to time ; and (iii.) that the County Medical Officer of Health should from time to time, as he thought fit, visit some of the schools during the progress of inspections, so that he might be able to report to the Education Committee whether or not he was satisfied that the inspections were properly carried out. My own opinion was that, for the purpose of carrying out completely the scheme of medical inspection as set out in the aforementioned memorandum and official circular of the Board of Education, the services of three whole-time School Medical Officers would be required to cover the area of the Administrative County of Northampton ; but it was deemed advisable by the Education Committee to ascertain the requirements of the County in a more practical manner by the appointment, in the first instance, of a single School Medical Officer only. Accordingly, a School Medical Officer was advertised for in the principal Medical Journals of March 28th, and April 4th, 1908, at a salary of £300 per annum with travelling expenses. On the 30th May, 1908, Dr. J. M. Clements was appointed, and on the understanding that he would enter on his duties on the 1st September, 1908. On the 5th July following his appointment, however, Dr. Clements sent in his resignation, he having been appointed in the meantime Medical Officer of Health for the Borough of Batley. This

unfortunate occurrence, necessitating as it did delay in the commencement of the work of medical inspection, was followed by a fresh advertisement on the 8th August, 1908; but on this occasion the salary was advertised at £350 per annum rising to £400 per annum. On the 22nd of September, 1908, Dr. H. L. P. Hulbert, who had recently been acting as Assistant School Medical Officer under the City of Manchester Education Committee, was appointed, and he was able, fortunately, to enter on his duties on the 1st October following. During the first few weeks after entering on his office, Dr. Hulbert was engaged chiefly in the drawing up of circular notices in consultation with the Secretary to the Education Committee and myself, and in deciding on other matters, based on his experience with the actual work of inspection at schools in Manchester, which would make for the working of a scheme of inspection with the least possible risk of friction in this County. I am glad to be able to report that the subsequent inspections of school children in the Wellingborough, Finedon, and Irthlingborough Urban Districts, down to the 17th December, 1908, were carried out without any difficulty, and that there is no immediate prospect of any such arising in the future. A summary of the results of the first inspections of school children in this County appears in Appendix II. of this Report,* for the sake of conveying general information on the subject, and as indicating the importance of such inspections in relation to the public health circumstances of the community. In this last connection, it may be pointed out that while the School Medical Officer will notify to the local Medical Officer of Health, in his capacity as a registered medical practitioner—but not for payment—any case of notifiable infectious sickness which he may come across in the course of his school

* A full report, with more detailed statistical information, was presented to the Education Committee, under date 25th February, 1909.

inspections, the information as to the existence of non-notifiable diseases in schools will be made to me directly (vide Appendix III.), and, if desirable, by me to the District Medical Officers of Health. In this way, it is hoped that the increased knowledge as to special health conditions, prevailing in all parts of the County, may prove reciprocally helpful in the forwarding of schemes of amelioration based on well-considered lines.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

The subject of the Annual Reports of Medical Officers of Health is receiving enhanced attention at the hands of the Local Government Board, and it is desirable, therefore, to comment on some points in the last issued Memorandum of the Board thereon. Instructions as regards the preparation of annual reports by medical officers of health have been sent out by the Board for many years, and the growing needs of public health administration have found expression in successive revised memoranda. The memorandum dated November, 1908, is the most comprehensive of the series. From the point of view which the County Council may be expected to take, the period of time occupied by a District Medical Officer of Health in the preparation of his annual report is a matter of some importance. The County Council desire naturally to have before them the summarised report on the public health circumstances of their Administrative area at as early a date as possible, and before matters of importance with which they may be able to deal have become complicated through delays. My report has been presented hitherto at the July meeting of the County Council, and I hope that there will be no deviation from this practice in the future. It is very difficult, however, to adhere to this custom unless the annual reports which have to be abstracted are received in reasonable time after the commencement of the year. In the past, the reports have been received generally within the first three months of the year, which was the

maximum time for their presentation set out in the previous memorandum of the Board, and in this County it has been the practice to withhold the grant towards the salary of the medical officer of health, in the happily rare instances where this limit has been exceeded, until the receipt of his report. It ought to be noted, therefore, that in spite of the increased requisitions of the Local Government Board in the aforementioned Memorandum of November, 1908, the maximum time-limit for the issue of annual reports by medical officers of health remains the same. In this memorandum stress is laid on the importance of the fullest information being given in regard to conditions of milk supply, and as to tuberculous milk, as well as of other foods. Information is particularly asked for as to the "number of carcasses and parts of carcasses "condemned for tuberculosis," and as to the methods of control of tuberculosis in man. In respect of water supply, inquiry is now requested as to whether local waters in use have plumbo-solvent action, and whether administrative action has been taken in respect of such contamination. Detailed information on these and other matters, and special inquiries in regard to them, may easily lead to expansions in the bulk of some of the annual reports; and certainly some of the reports of districts in this county are capable of useful expansion. It will be unfortunate, however, if delay in the production of the reports is assumed to be justified. Attention must be given also to a very important intimation in the circular letter of the Local Government Board which accompanied the Memorandum. It is stated in this that the Board have been approached by the Board of Agriculture and Fisheries as to the desirability of making arrangements for the Notification of cases of Glanders, Anthrax, and Hydrophobia in man, where the facts point to the possibility of infection having been derived from an animal or its carcass, or where enquiry under the Diseases of Animals Acts seems to the medical men concerned to be

prima facie desirable. An intimation is given, therefore, that if any district council desires to extend the provisions of the Infectious Disease (Notification) Act, 1889, in their district to glanders, anthrax, and hydrophobia in man, the Board will be prepared to entertain the application favourably. This is a very important concession, and one that I hope greatly will be taken very general advantage of in the districts of all counties in England and Wales.

The following table shows the dates on, and the form in, which the respective Annual Reports were received by me :—

NAME OF DISTRICT.	DATE OF RECEIPT.	FORM.
Brackley Borough ...	January 18th, 1909 ...	Typed.
Daventry Rural ...	„ 21st, „ ...	„
Hardingstone Rural ...	„ 21st; „ ...	Printed.
Northampton „ ...	„ 26th, „ ...	„
Finedon Urban ...	„ 27th, „ ...	„
Higham Ferrers Borough	February 2nd, „ ...	„
Irthlingborough Urban	„ 3rd, „ ...	„
Wellingborough „ ...	„ 3rd, „ ...	Typed.
Thrapston Rural ...	„ 4th, „ ...	Printed.
Raunds Urban ...	„ 10th, „ ...	„
Rothwell Urban ...	„ 10th, „ ...	„
Kettering Rural ...	„ 15th, „ ...	„
Kettering Urban ...	„ 19th, „ ...	„
Wellingborough Rural	„ 20th, „ ...	„
Rushden Urban ...	„ 23rd, „ ...	„
Brackley Rural ...	„ 23rd, „ ...	Auto-typed
Oundle Rural ...	„ 26th, „ ...	Printed.
Oundle Urban ...	March 2nd, „ ...	„
Potterspury Rural ...	„ 2nd, „ ...	„
Desborough Urban ...	„ 5th, „ ...	„
Middleton Cheney Rural	„ 6th, „ ...	„
Brixworth Rural ...	„ 6th, „ ...	„

NAME OF DISTRICT.	DATE OF RECEIPT.	FORM.
Oxendon Rural ...	March 9th, „	... Printed.
Crick Rural ...	„ 19th, „	... M.S. Printed later.
Towcester Rural ...	„ 29th, „	... Printed.
Gretton Rural ...	„ 31st, „	... „
Daventry Borough ...	April 2nd „	... „
Easton-on-the-Hill Rural	„ 7th, „	... M.S.

AREA AND POPULATION.

There being no change of area to record, the particulars are the same as for the preceding year; there seems no necessity, therefore, for repeating the detailed table shewing the area, in acres, of the respective Urban and Rural Districts. The Urban Districts have a total area of 40,032 acres, and are twelve in number, while the Rural Districts comprise 541,647 acres, and are sixteen in number; the whole area of the County thus amounts to **581,679** acres.

POPULATION.—From the returns of the District Medical Officers of Health, it appears that the estimated population of the County for the year 1908 was 101,301 in the combined Urban Districts, 116,464 in the combined Rural Districts, and **217,765** for the whole Administrative County. Thus, as compared with the year 1907, there has been an increase of population in the combined Urban Districts amounting to 954, and in the combined Rural Districts a decrease of 124, making a total increase of population during the year 1908 of 830 for the whole Administrative County, as against an increase of 616 persons in 1907, 410 in 1906, 2,035 in 1905, and 1,264 in 1904.

The following facts, with regard to the estimated population of their Districts, are given in certain of the Reports of the Medical Officers of Health:—

HIGHAM FERRERS BOROUGH.—“ I have based my figures
 “ on an estimated population of 2,920, the same as last year,
 “ as I have no reason to think there has been any material
 “ alteration since then.”

FINEDON URBAN.—“ There are 808 inhabited and 108
 “ uninhabited houses in the town, and I estimate the popula-
 “ tion to be about the same as last year, viz., 4,040.

IRTHLINGBOROUGH URBAN.—“ No new houses have been
 “ built, and as there are about 15 fewer houses empty than
 “ last year, I estimate the population at 4,670, an increase
 “ of 70.”

KETTERING URBAN.—“ The estimate of the population
 “ of Kettering as 31,338 is a fair and reasonable one. From
 “ my calculation you will be glad to see that there are 45
 “ more houses occupied than in 1907. The greatest increase
 “ is in the North ward, the West ward being the only one
 “ where there has been a decrease.”

RAUNDS URBAN.—“ The number of inhabited houses
 “ this year is 960, which gives the estimated population of
 “ the District as 4,320, an increase of 36 over that of 1907,
 “ when it stood at 4,284.”

RUSHDEN URBAN.—“ The estimated population is
 “ 15,192. The majority of the inhabitants are engaged
 “ in the manufacture of boots and shoes and processes
 “ incidental thereto.”

WELLINGBOROUGH URBAN.—“ The number of inhabited
 “ houses in 1908 was 4,694, and if we allow $4\frac{1}{2}$ persons to

“each house this gives us the population of 21,083. . .
 “There were 56 new houses erected.”

BRIXWORTH RURAL.—“An estimated population of
 “11,820 and about 2,900 houses, averaging 4.1 inmates.”

DAVENTRY RURAL.—“There is no reason to think
 “there has been any material change during the year in the
 “population of the District; I therefore estimate it to be
 “about the same as given by the last census, namely, 13,425.
 “The inhabited houses are also about the same, and give an
 “average number of 4 persons per house.”

HARDINGSTONE RURAL.—“I have again assumed the
 “population of the district to be equal to that of the previous
 “year, though perhaps there may be a slight decrease as
 “shown by the last census. I rather think the decrease does
 “not continue: few houses are being built, but none are
 “being demolished to any extent, and on the whole the two
 “probably balance.”

KETTERING RURAL.—“The estimated population at
 “middle of 1907 of 13,000 cannot have increased during
 “the year following to any appreciable extent. The brick
 “works at Corby have been closed, throwing many men out
 “of employment, and one of the ironstone mines at the
 “same place is not employing so many men; on the other
 “hand, the new furnaces there are employing 91 new hands
 “which, with the excess of births over deaths of 165, ought
 “to maintain the population at almost the same figure as
 “last year, viz., 13,000. Only 18 new houses have been
 “occupied.”

MIDDLETON CHENEY RURAL.—“The population at the

“ census in 1901 was 2,414 : the number of occupied houses
 “ at that time was 626, giving an average of 3.8 persons
 “ for each residence. Since 1901 the population appears to
 “ have considerably decreased owing to the great exodus
 “ of the working classes to the manufacturing towns, and
 “ this assumption appears still more conclusive when the
 “ birth-rate of the district is considered, which during the
 “ past seven years has not reached that of 1901.”

NORTHAMPTON RURAL.—“ I have again assumed the
 “ population of the district to be the same as in the previous
 “ years since the last census ; there have been a few houses
 “ built at Duston, but this is the only village in which any
 “ building is going on : therefore, as the last census showed
 “ a slight decline, building operations here are, I consider,
 “ only just sufficient to counterbalance this.”

OXENDON RURAL.—“ The total population in the 1901
 “ census numbered 4,202 ; since that date the births have
 “ exceeded the deaths by an average of about 10 per annum,
 “ so that the population of the district seems to be slightly
 “ increasing. The population of the individual villages
 “ varies from 30 to 700, the majority being under 200.”

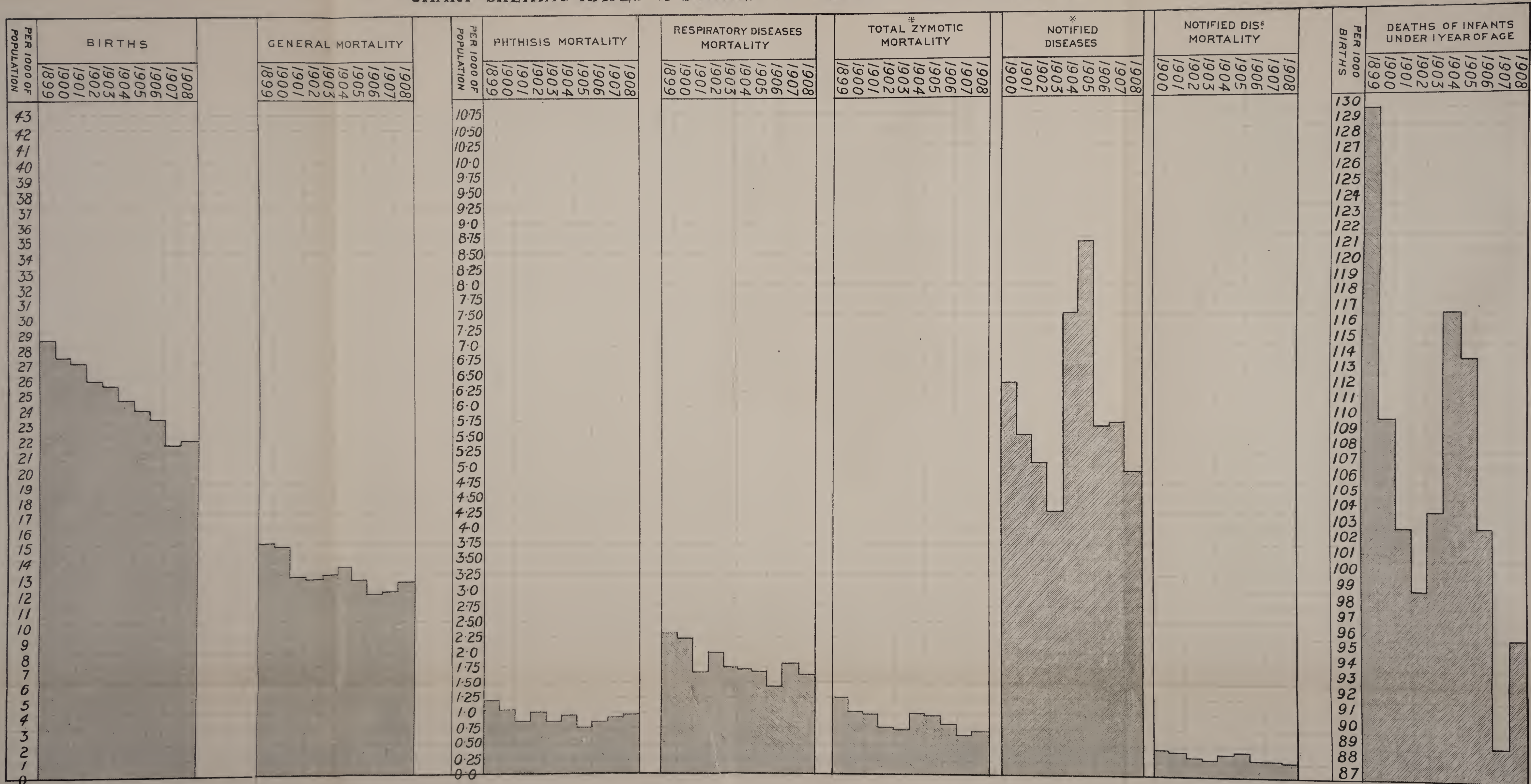
WELLINGBOROUGH RURAL.—“ The Wellingborough Rural
 “ District consists of two sub-divisions, viz., the Welling-
 “ borough and the Higham Ferrers, with an estimated
 “ population of 13,917, the Wellingborough containing
 “ 6,380, and the Higham Ferrers 7,537. The inhabitants are
 “ principally employed in the boot and shoe manufacture,
 “ and others in agricultural pursuits. The increase of the
 “ population has been 15 in the Wellingborough and 108
 “ in the Higham Ferrers district.”

BIRTHS.

In his preliminary summary for the year 1908, the Registrar-General states that the birth-rate in England and Wales was 26.5 per 1000 of the population, which is 0.2 per 1,000 above the rate in 1907. Compared with the average in the ten years 1898-1907, the birth-rate for England and Wales in 1908 showed a decrease of 1.6 per 1,000 of the population. The birth-rate for the Administrative County of Northampton in 1908 shows a decrease of 3.83 as compared with the average for the County in the years 1898-1907, which is more marked, therefore, than is the difference in respect of England and Wales taken together. In Northamptonshire during 1908 there were 4,755 births, as against 4,643 births in 1907, as against 4,997 births in 1906, and as against 5,168 in the year 1905. Of those for the year 1908, 2,150 were in the Combined Urban Districts as against 2,139 in 1907, and 2,605 in the Combined Rural Districts as against 2,504 in 1907. There was thus a slight check in the year 1908 to the continuous decline in the number of births for the County in both the Combined Urban and Rural Districts, and an improved County birth-rate to the extent of 0.43 per 1,000 of the estimated population as compared with that recorded for the year 1907. This is a satisfactory feature in itself, but it is noteworthy that the gain in the rate per 1,000 of population was due entirely to the increased number of births in the combined rural districts.

The average birth-rate of the whole Administrative County per 1,000 of the population, and of the Combined Urban and Rural Districts respectively for the years 1899-1908 is shown in the following table, together with, for purposes of comparison, the corresponding rates for England and Wales, and for the 76 large towns in England and Wales, taken from the Registrar-General's returns :—

CHART SHEWING RATES OF BIRTHS AND CERTAIN MORTALITIES, &c.



‡ INCLUSIVE OF DEATHS FROM DISEASES NOT NOTIFIABLE

* THE NOTIFICATION OF INFECTIOUS DISEASES ONLY BECAME COMPULSORY IN ALL DISTRICTS ON JANUARY 1ST 1900.

Areas.,	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908
Adminis- trative County ..	28.54	27.33	27.15	25.96	25.53	24.61	23.93	23.10	21.40	21.83
Urban Districts ..	32.15	30.62	30.38	27.88	26.94	25.96	24.23	23.46	21.31	21.22
Rural Districts ..	26.10	25.04	24.08	24.43	24.38	23.49	23.68	22.78	21.47	22.36
England & Wales ..	29.2	28.9	28.5	28.6	28.4	27.9	27.2	27.0	26.3	26.5
*Large Towns in England & Wales ..	30.2	29.4	29.2	30.0	29.6	29.1	28.2	27.9	27.0	27.0

*It is to be noted that the group of large towns numbers 76 from the year 1902; it consisted of 33 towns in preceding years.

The following comments on the variations in the birth-rates of some of the Districts in the Administrative County have been taken from the Reports of the Medical Officers of Health :—

BRACKLEY BOROUGH.—“ There were 16 births, giving
“ a birth-rate of 18.6. This is the lowest rate on record for
“ this borough, the average for 10 years being 24.”

DAVENTRY BOROUGH.—“ The birth-rate of 16.93 is
“ very low and much below the average (21.43) for the past
“ ten years.”

HIGHAM FERRERS BOROUGH.—“ The birth-rate, although
“ it is higher than it has been for the last three years, con-
“ tinues low.”

DESBOROUGH URBAN.—“ Last year I had occasion to
“ bring to your notice the lamentable fact that the birth-rate
“ 22.2 per 1,000 then presented was the lowest recorded for

“ the previous ten years. It therefore gives me much satisfaction to now place before you a birth-rate of 29.6 per 1,000 living for the year 1908, the highest since the year 1901, there having been registered 118 legitimate and 4 illegitimate births, or a total of 122, 64 males and 58 females. It is to be hoped that another year may find this rise in the birth-rate maintained if not increased.”

FINEDON URBAN.—The births for the year give “ a rate of 21.5 per 1,000 per annum. The average rate for the past ten years bring 29.1 per 1,000 per annum.”

IRTHLINGBOROUGH URBAN.—“ Although the rate will compare very favourably with that of any of the other Urban Districts in the County, as it is higher than any recorded in 1907, it is far short of what it ought to be. Abortions are becoming much too frequent, and are induced in many cases I have no doubt by the taking of one or other of the many advertised noxious drugs, or it may be that in Irthlingborough there is someone who supplies these remedies.”

KETTERING URBAN.—“ The number of births registered during the year 1908 was 683, of which 355 were males and 328 females. Of these births 27 were illegitimate, 13 males and 14 females. Calculating from these births the Birth-rate 1908 would be 21.7. As the Notification of Births Act came into force in January, 1908, I propose calculating the Birth-rate from the notices sent to me ; as we now know the exact number of births which actually occur during the year. The notifications I received were 666 in number, 348 males and 318 females. Of these 12 males and 10 females were illegitimate. From these returns the Birth-rate of Kettering for 1908 will be 21.2, which is the lowest it has yet been although Kettering is no worse off than any other Urban Authority. It is

“ unnecessary for me to explain why this is, as it is well-known
 “ throughout the breadth of the land that the social and
 “ economic conditions which at present prevail make for
 “ this low Birth-rate.”

OUNCLE URBAN.—“ Thirty-seven births were registered
 “ giving a rate of 15.3 per 1,000, a rate below the average.
 “ Two of these children succumbed, owing to premature
 “ birth, within a few hours of their birth.”

RAUNDS URBAN.—“ The number of births registered
 “ during the year was 120, or an increase of 21 over 1907,
 “ the number then being 99.”

ROTHWELL URBAN.—“ The birth rate was 19.6, which
 “ is lower than it has been for the past ten years, the previous
 “ lowest being in 1903, when it was 19.7.”

WELLINGBOROUGH URBAN.—In regard to the number of
 “ births, this is a marked increase on last year. I would also
 “ like to mention that it is the first time in all my experience
 “ that there were more girls born than boys.”

BRACKLEY RURAL.—“ The birth rate was 18.8 per 1000,
 “ the lowest I have ever reported.”

HARDINGSTONE RURAL.—“ The total number of births
 “ during the year was only 150—nine less than in the previous
 “ year, which was then the lowest on record. The average
 “ number for the last ten years was 177, with a ratio per 1,000
 “ of 22, whilst this year's ratio is only 19. I can only account
 “ for this decrease by supposing that it is chiefly the old
 “ people that are left in the villages, and that most of the
 “ young ones migrate into the town, where they get better
 “ wages and more amusement. Of the births, 83 were
 “ males and 67 females. . . . The births in the Hardingstone
 “ sub-district were just above the average, so that the great

“ falling off is in the Brafield sub-district, where there were
 “ 53 births against an average of 73 for the last ten years.
 “ Most of the villages in the Brafield district are farther
 “ from the town than those in the Hardingstone district,
 “ so that here are most of the old people again ; whilst in
 “ Hardingstone and Wootton villages, at any rate, there is
 “ often keen competition for any vacant cottages from people
 “ working in the town.”

KETTERING RURAL.—“ Exactly 300 births have been
 “ registered, giving the rate per thousand 23.07, compared
 “ with 23.9 for 1907 ; it will be noticed on referring to the
 “ table of vital statistics that the birth-rate does not increase
 “ in proportion to increase of population during the last ten
 “ years.”

MIDDLETON CHENEY RURAL.—“ Fifty-five births have
 “ been registered in the district during the past year, an
 “ increase of twelve since the previous one, and producing
 “ a birth-rate of 22.7 per thousand of the estimated popula-
 “ tion.”

NORTHAMPTON RURAL.—“ The total number of births
 “ during the year was 133, exactly the same number as in
 “ the year 1905. In 1906 there were 127 births, and in 1907
 “ only 107, but these years were remarkable for their small
 “ number of births, and excepting these two years the present
 “ is the smallest number of births during the last ten years.
 “ The birth rate per 1,000 works out at 21, whilst the average
 “ for the last ten years is 23.4, so that the birth rate is still
 “ below the average. Of these births 57 were males and 76
 “ females.”

OUNCLE RURAL.—“ The number of births registered
 “ was 264, giving a rate of 25.5, which is a decided increase
 “ on the past two years.”

OXENDON RURAL.—“ The number of births for the year “ is 91, which is the highest figure since 1898 and six above “ the yearly average.”

The birth-rate varied in the Urban Districts from 15.3 in the Oundle District to 29.6 in the Desborough District, and in the Rural Districts from 18.7 in the Brackley District to 27.4 in the Oundle District.

Arranged in the order of their birth-rates the Urban Districts stand thus :—

	<i>Per 1,000 of Population.</i>		<i>Per 1,000 of Population.</i>
Desborough ..	29.6	Rushden ..	20.4
Raunds ..	27.7	Wellingborough ..	19.7
Irthlingborough ..	26.1	Rothwell ..	19.6
Higham Ferrers Boro'	21.5	Brackley Borough ..	18.6
Finedon ..	21.5	Daventry Borough ..	16.9
Kettering ..	21.2	Oundle ..	15.3

The position of the Rural Districts in respect of their birth-rates is as follows :—

	<i>Per 1,000 of Population.</i>		<i>Per 1,000 of Population.</i>
Oundle ..	27.4	Towcester ..	22.8
Potterspury ..	25.6	Middleton Cheney ..	22.7
Thrapston ..	24.9	Oxendon ..	21.6
Northampton ..	24.8	Brixworth ..	20.9
Daventry ..	23.8	Gretton ..	20.3
Crick ..	23.6	Wellingborough ..	20.2
Easton-on-the-Hill	23.2	Hardingstone ..	19.1
Kettering ..	23.0	Brackley ..	18.7

DEATHS.

General Mortality.—I have said on more than one occasion in my annual reports that, in my opinion, the general mortality rate for the Administrative County of Northampton ought not to greatly exceed, if at all, 12 per 1,000 of the estimated population. I am glad, therefore, to be able to say in respect of the year 1908 that the general death-rate of the County is not an unsatisfactory one. The improvement

which can be shewn in this matter may be taken fairly from the year 1897. As I showed in my last annual report, the average general mortality rate for the Administrative County in the decade 1897-1906 was 13.89 per 1,000 of the estimated population ; in the first half of that decade the average rate was 14.87, in the latter half it was 12.91. The general mortality rate for the year 1907 was 12.02, the lowest but one in the years since 1897, and I now have to record that for the year 1908 the nett death-rate for the Administrative County was 12.43. As compared with the year 1907, however, there are exceptional increases in the mortalities for the year 1908 from the two non-notifiable infectious diseases of Whooping-cough and Influenza, from Premature Birth, and from constitutional diseases tabulated under the heads of " Cancer and malignant disease," and " Heart disease." In regard to these last diseases it is to be recognised that there is a certain amount of chance in the allocation of deaths, from them after long standing, to one or other of adjoining years ; but I am glad that the exceptional incidence of deaths from these diseases in 1908, while raising the death-rate above that for the year preceding, have not been sufficient to raise it to that of the immediately preceding five year period. As in past years, so for the year 1908, it is noticeable that the mortality rate for the combined Rural Districts is considerably higher than that for the combined Urban Districts, but this unfavourable aspect of the case is discounted greatly by the fact that in the combined Rural Districts the number of deaths of persons aged 65 years and upwards was as much as 46.5 per cent. of the total deaths for the Rural Districts, as against 29.8 per cent. for the same age class in the Combined Urban Districts ; this fact may be taken as an indication, of what is commonly found, that many aged persons migrate from the towns into the rural districts when they have passed the period at which they can compete successfully in town labour.

The total number of deaths in the Administrative County during the year 1908 was 2,749, as against 2,656 in 1907, 2,638 in 1906, 2,812 in 1905, 2,964 in 1904, and 2,838 in 1903. Of the former 1,149 occurred in the Urban Districts, and 1,600 in the Rural Districts. The total deaths registered, however, are subject to deductions for the purpose of arriving at the nett mortality of the County. They include, in respect of the Combined Rural Districts, deaths which were recorded in the Berry Wood Asylum, situated in the Northampton Rural District, and others in the Infectious Diseases and Phthisis Hospitals of the County Borough of Northampton, which are situated in the Brixworth Rural District; of the former 31 and of the latter 11, were persons not belonging to the Administrative County. These deaths have been excluded, therefore, in working out the nett mortality-rate for the Administrative County in the subjoined table. The deaths of persons belonging to the Administrative County which occurred in Berry Wood Asylum, have been allocated, as previously, to the several districts to which they belonged, and the number, age, and cause of death and the extent of such allocation, is shown in Table III. of this report. For the preparation of that Table, I gratefully acknowledge my indebtedness to the Medical Superintendent of the Asylum.

The following table shows the general mortality rates for the Administrative County, England and Wales, and the large towns, during the years 1899—1908:—

Districts.	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908
Adminis- trative County ..	15.13	14.96	13.05	12.96	13.09	13.70	12.86	11.97	12.02	12.43
England & Wales ..	18.3	18.3	16.9	16.3	15.4	16.2	15.2	15.4	15.0	14.7
Large Towns in England & Wales ..	20.2	19.5	18.6	17.4	16.3	17.2	15.7	15.9	15.4	15.8

The following statements with regard to general mortality are to be found in the Reports of the Medical Officers of Health for the Districts hereunder named:—

BRACKLEY BOROUGH.—“ The nett death-rate, calculated “ on a population of 2,467, was 10.1 per 1,000. The average “ rate for 10 years was 12.6.”

HIGHAM FERRERS BOROUGH.—“ The death-rate is low, “ although not quite so low as last year, when it was the “ lowest in the county. Taking a series of years it is satis- “ factory to note that the death-rate shows a steady decline.”

DESBOROUGH URBAN.—“ There were registered 61 “ deaths, namely 29 males and 32 females, furnishing a death- “ rate of 14.8 per 1,000 living, which I regret to note is not “ only above that of the previous year but also higher than “ the average recorded for the decennium 1898-1907.”

FINEDON URBAN.—“ The number of deaths registered “ during the year was 40, giving a rate of 9.9 per 1,000 per “ annum. This is exactly the same rate as last year, and “ is a very low one. The average rate for the past ten years “ is 12.3 per 1,000 per annum.”

IRTHLINGBOROUGH URBAN.—“ Forty-five deaths were “ registered in the district, giving a rate of 9.6, compared “ with 57 deaths and a rate of 11.9 last year. Two other “ deaths of residents occurred in Northampton Hospital, “ and in accordance with the instructions of the Registrar- “ General they must be included, so that the nett number of “ deaths in the district was 47, giving a rate of 10.06. This “ is the lowest rate I have been able to record.”

KETTERING URBAN.—“ During the year 1908 there were “ 357 deaths, of which 198 were males and 159 females. “ The resulting death-rate is equal to 11.3 per 1,000, and

“ deducting 20 deaths of non-residents we get the nett deaths
 “ at all ages for the district as 337, but one must be added
 “ who died in a private Hospital at Birmingham, making
 “ the total 338. Five deaths occurred among illegitimate
 “ children. The nett death-rate is 10.7. The death-rate
 “ for 1908 being 10.7 nett is most satisfactory considering
 “ the prevalence of Infectious Disease throughout the whole
 “ of the year. It is the third lowest during the last 9 years,
 “ 1907 being 10.0 and 1906 being 9.9.”

OUNDLE URBAN.—“ Forty-four deaths were registered,
 “ 15 of which were those of non-residents in the district,
 “ giving a total of 29 belonging to the district and a rate
 “ of 12.06, which is very satisfactory.”

RAUNDS URBAN.—“ The number of deaths registered
 “ during 1908 from all causes was 52; of these 28 were
 “ males and 24 females. This is an increase of 5 over last
 “ year, when the number stood at 47. The death-rate is
 “ therefore 12 per 1,000 of the estimated population; the
 “ rate last year being 10.9.

ROTHWELL URBAN.—“ The death-rate, 10.5, for 1908
 “ is below the average for the last ten years, which is 12.2.”

RUSHDEN URBAN.—“ The deaths from all causes num-
 “ bered 121, or at the rate of 7.9 per 1,000 of the population,
 “ as compared with 126, or at the rate of 8.01 per 1,000
 “ last year.”

WELLINGBOROUGH URBAN.—“ The number of deaths
 “ was 258 at all ages. Of these 101 were of persons over 65,
 “ and 43 in children under one year. There were 30 deaths
 “ of non-residents, and this number deducted from the
 “ above gives 228, and a death-rate of 10.8, which with the
 “ exception of last year is the lowest during the last 12 years.”

BRACKLEY RURAL.—“ The death-rate for the year is
 “ 13.5 per 1,000 of the population, the number of deaths
 “ registered having been 97. . . No deaths occurred from
 “ zymotic disease.”

DAVENTRY RURAL.—“ The number of deaths registered
 “ at all ages, including the deaths of seven residents registered
 “ in public institutions beyond the district was 168 ; males
 “ 86, females 82 ; and this gives a death-rate of 12.5 per
 “ 1,000, which is very satisfactory and well below the average
 “ of the last ten years.”

GRETTON RURAL.—“ The corrected death-rate is 14.9
 “ per thousand of the population. It is above the average
 “ for your district.”

HARDINGSTONE RURAL.—“ The total number of deaths
 “ at all ages was 104, which is the lowest for the last 5 years.
 “ This is a fairly favourable mortality, the average for 10
 “ years being 106.4, with a mortality per 1,000 of 13.3,
 “ whilst the mortality of this year is 13 or rather below the
 “ average. No less than 18 of these deaths were in people
 “ over 80 years of age, which is certainly a large number,
 “ and seems to bear out my view that it is the old people
 “ that are chiefly left in these villages.”

KETTERING RURAL.—“ The total deaths at all ages
 “ amounted to 137, an increase of 2 only over last year's
 “ total ; this gives a death-rate of 10.5, well below the average
 “ of the last 10 years.”

NORTHAMPTON RURAL.—“ The total number of deaths
 “ at all ages for the whole district was 167, giving a ratio per
 “ 1,000 of 26.2. Of these deaths, however, 91 occurred in
 “ Berry Wood Asylum among non-residents, so that deduct-
 “ ing these we find there were 76 deaths of residents in the

“ district, with a ratio per 1,000 of 14. This is a larger
 “ number of deaths than has occurred during the previous
 “ three years, but compares fairly well with some other
 “ years; the mean mortality for the previous ten years
 “ working out at 12.5 per 1,000.”

OUNCLE RURAL.—“ The deaths numbered 98, giving a
 “ rate of 12.2, or correcting by adding the deaths of persons
 “ belonging to the District who died outside the district a
 “ rate of 13.1.”

OXENDON RURAL.—“ The deaths number 53, which is
 “ eight below the yearly average.”

WELLINGBOROUGH RURAL.—“ One hundred and forty-
 “ three deaths have been registered—66 in the Wellingborough
 “ and 77 in the Higham Ferrers district, thus giving the low
 “ death-rate from all causes of 10.2 per 1,000.”

The nett death-rate varied in the Urban Districts from 8.0 in the Rushden District to 15.0 in the Desborough District, and in the Rural Districts from 10.6 in the Wellingborough District to 20.5 in the Easton-on-the-Hill District, per 1,000 of the respective populations.

Arranged in the order of their nett death-rates, the Urban Districts stand thus:—

	<i>Per 1,000 of Population.</i>		<i>Per 1,000 of Population.</i>
Rushden	8.0	Wellingborough	11.2
Higham Ferrers Boro'	9.0	Brackley Borough	11.3
Finedon	10.1	Oundle	12.0
Irthlingborough	10.2	Raunds	12.0
Rothwell	10.4	Daventry Borough	12.4
Kettering	10.9	Desborough	15.0

The position of the Rural Districts in respect of their nett death-rates is as follows :—

	<i>Per 1,000 of Population.</i>		<i>Per 1,000 of Population.</i>
Wellingborough ..	10.6	Brackley ..	14.4
Kettering ..	11.5	Northampton ..	14.4
Thrapston ..	12.4	Crick ..	14.7
Daventry ..	12.8	Oundle ..	14.7
Brixworth ..	13.2	Gretton ..	14.9
Hardingstone ..	13.6	Towcester ..	15.2
Oxendon ..	13.8	Potterspury ..	19.6
Middleton Cheney ..	14.0	Easton-on-the-Hill ..	20.5

Infantile Mortality.—I am glad to be able to record the fact that the infantile mortality rate for the Administrative County was below 10 per cent. of the births for the year 1908, and that a lower rate than that for 1908 has only occurred once since the year 1897. The infantile mortality rate for the year 1908 was 95 per 1,000 births as against 88 in 1907, and an average of 108 for the ten years 1898-1907: the rate for the five year period 1897-1901 was 119 per 1,000 births, and for the succeeding five year period 1902-1906 the rate was 106 per 1,000 births. The comparison, therefore, of the infantile mortality rate for 1908 shows satisfactorily as compared with past years, and is in itself a satisfactory rate if account be taken of the mortality of infants from whooping-cough, of which there was an epidemic in several parts of the County, and was not due to high mortality among them from intestinal diseases. In this connection also it may be pointed out that the rate of mortality in England and Wales among infants under one year of age to 1,000 registered births was 121 for the year 1908, which is three above the like rate for the year 1907, as compared with the average of 142 per 1,000 births for the preceding ten years.

The average infantile death-rate for the whole Administrative County per 1,000 births, and of the combined Urban and Rural Districts respectively, for the years 1899—1908 is shown in the following table, together with, for purposes of comparison, the corresponding rates for England and Wales, and for the large towns in England and Wales, taken from the Registrar-General's returns :—

Districts.	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908
Adminis- trative County ..	129	109	102	98	103	116	113	102	88	95
Urban Districts ..	143	126	109	116	114	117	120	116	89	108
Rural Districts ..	118	95	96	80	92	115	106	91	87	84
England & Wales ..	163	154	151	133	132	146	128	133	118	121
Large Towns in England & Wales ..	181	172	168	145	144	160	140	145	127	128

The following extracts from the Annual Reports of the District Medical Officers of Health relate to this subject :—

BRACKLEY BOROUGH.—“ The infantile mortality (i.e., “ under one year of age per 1,000 births) was 86.9. The “ average rate was 94.”

HIGHAM FERRERS BOROUGH.—“ There were only two “ deaths of children under one year, which gives an infantile “ death-rate of 31.7 per 1,000 births. Taking a series of “ years the infantile death-rate shows a continuous decline, “ and this, together with the very low rate I have to record “ this year, encourages the hope that the great loss of infant life “ which prevails generally is steadily diminishing in this town.”

DESBOROUGH URBAN.—“ The baby mortality although
 “ somewhat less than that recorded for the previous year
 “ is to my mind unduly high, in fact is capable of great
 “ reduction. This expression of opinion will I venture to
 “ think not be regarded as unwarrantably pessimistic in
 “ character when the fact is considered that with reference
 “ to 7 of the whole number of 12 deaths, one was due to
 “ Whooping Cough and six to wasting diseases, and in the
 “ latter class the infants were all more or less hand-fed,
 “ a process which entails time, trouble, care, cleanliness and
 “ intelligence, and exposes the life of the infant to greater
 “ risks than when nature herself is the purveyor.”

FINEDON URBAN.—“ Fifteen deaths of children under
 “ one year of age occurred, giving an infantile death-rate of
 “ 172.4 per 1,000 births registered. This is a high rate,
 “ and is accounted for to some extent by the prevalence of
 “ Bronchitis during the early part of the year. The average
 “ for the past ten years is 133.7 per 1,000 births registered.”

IRTHLINGBOROUGH URBAN.—“ Only 9 deaths under one
 “ year of age took place, giving a rate of 73.7, compared with
 “ 13 deaths and a rate of 117.1 last year. This is the lowest
 “ rate yet recorded, and it is exceedingly satisfactory and
 “ encouraging to see such a reduction.”

KETTERING URBAN.—“ The infantile mortality rate for
 “ 1908 is 112.7, which is a great increase compared to last
 “ year. Last year's low rate was unique owing to special
 “ circumstances. The present rate, however, is equal to the
 “ lowest rate in the preceding 10 years, viz., in 1902, and it
 “ was then considered to be very low. The increase this year
 “ is explained by more deaths from Premature Birth, Debility,
 “ ‘ Diarrhœa, Measles, Whooping Cough, and Pneumonia.’ . . .
 In respect of notified births, “ your Lady Inspector visits

“ the homes whenever it is necessary, and gives advice and
 “ help when asked for, but where a medical practitioner is
 “ in attendance she does not call at the house. If the excel-
 “ lent cards on Feeding of Children, drawn up by the County
 “ Medical Officer of Health, have not already been left at the
 “ house by the Midwife or Nurse, your Inspector leaves them.
 “ As far as I am aware no friction has occurred, and in many
 “ cases I know her visits have been welcomed and appre-
 “ ciated.”

RAUNDS URBAN.—“ The number of deaths registered of
 “ children under one year of age was 13, and the rate per
 “ 1,000 births registered was 108.3. This rate is much
 “ higher than the three preceding years, and lower than the
 “ three years prior to that.”

ROTHWELL URBAN.—“ The infantile mortality for 1908
 “ is 161.6 per 1,000 births, which is a marked increase on the
 “ average for the last ten years, which is 152.5 per 1,000
 “ births.”

RUSHDEN URBAN.—“ Of the infants under one year of
 “ age there were 35 deaths, or at the rate of 112.9 per 1,000
 “ registered births, 13 of which were premature, as compared
 “ with 25 deaths at the rate of 79.3 per 1,000 last year.”
 Some of these infants were born in 1907, so that the figures
 for 1908 cannot be taken as evidence of the influence of the
 Health Visitor's work during that year ; the detailed results
 of that work will be given in a special report, and referred to
 in the Annual Report for 1909.

WELLINGBOROUGH URBAN.—“ There is an increase in
 “ the deaths of children under 1 year, but last year was
 “ unusually low and this year, on the whole, compares very
 “ favourably with former years. There were 11 deaths

“ from Premature Birth. The death-rate of children under
 “ one year per 1,000 births registered is 103.8.”

DAVENTRY RURAL.—“ The infant mortality under one
 “ year was much more satisfactory than in former years,
 “ indeed it is the lowest we have had for many years, and
 “ only came to 75 per 1,000 births.”

GRETTON RURAL.—“ Only four of these deaths were
 “ among persons under 65, and there was no death under the
 “ age of 15. The Infant Mortality rate is therefore *nil*.”

HARDINGSTONE RURAL.—“ The total number of deaths
 “ in children under one year of age was 18, giving a ratio
 “ per 1,000 births registered of 120. This is a very high
 “ mortality, especially with such a low birth-rate, and has
 “ only been exceeded three times in the last ten years.
 “ The average for the ten years is 15.5, with a ratio per 1,000
 “ of 91.7. The causes of these deaths were—10 from prema-
 “ ture birth or some wasting disease of childhood, 5 from
 “ pulmonary diseases as bronchitis or pneumonia, one from
 “ whooping cough, and one from tubercular disease. Except-
 “ ing the pulmonary complaints and whooping-cough these
 “ are hardly preventable diseases, but are probably due
 “ to sickly infants being fed on insufficient or improper food.”

KETTERING RURAL.—“ The number of infant deaths
 “ has fallen from 31 in 1907 to 23 in 1908. With one excep-
 “ tion this is the lowest infantile mortality-rate ever recorded
 “ in this district, and is a fall of 25 per cent. compared with
 “ last year.”

NORTHAMPTON RURAL.—“ The total number of deaths
 “ in children under one year of age was 11. . . Whilst the

“ mortality per 1,000 births for the ten years averages 99.6,
 “ the ratio for the present year is only 82.7. Of these eleven
 “ deaths, six were due to atrophy or premature birth, four
 “ were due to diarrhoea, and one to whooping cough.”

OUNDLE RURAL.—“ The total number of deaths under
 “ one year was 17 ; but of these 5 are due to premature birth,
 “ leaving only 12. It is questionable whether any of these
 “ might have been prevented.”

OXENDON RURAL.—“ The number of deaths under one
 “ year of age is only two (one of these a premature child) ;
 “ this is the lowest figure for at least ten years, the average
 “ being only seven.”

WELLINGBOROUGH RURAL.—“ The infant mortality has
 “ been 138.3 per 1,000 for the whole district. . . This is much
 “ too high, although instructions as to feeding have been
 “ circulated through the district.”

The infantile mortality rate varied in the Urban Districts from 31.7 per 1,000 births in Higham Ferrers Borough to 172.4 in the Finedon District, and in the Rural Districts from 0.00 per 1,000 births in the Gretton District to 138.2 in the Wellingborough District.

Arranged in the order of their infantile mortality rates the Urban Districts stand thus :—

	<i>Per 1,000 Births.</i>		<i>Per 1,000 Births.</i>
Higham Ferrers Boro'	31.7	Raunds	108.3
Oundle	54.0	Kettering	112.7
Irthlingborough ..	73.7	Rushden	112.9
Brackley Borough ..	86.9	Daventry Borough ..	125.0
Desborough	98.3	Rothwell	161.6
Wellingborough ..	103.8	Finedon	172.4

The position of the Rural Districts in respect of their infantile mortality-rates is as follows :—

	<i>Per 1,000 Births.</i>		<i>Per 1,000 Births.</i>
Gretton	0.00	Kettering	76.6
Oxendon	21.9	Towcester	78.9
Crick	56.6	Northampton ..	82.7
Potterspury ..	70.3	Oundle	88.7
Thrapston	72.2	Brackley	103.7
Brixworth	72.5	Easton-on-the-Hill ..	117.6
Middleton Cheney ..	72.7	Hardingstone ..	120.0
Daventry	75.0	Wellingborough ..	138.2

Phthisis Mortality.—The Local Government Board have issued recently certain Regulations as to Tuberculosis, under date 18th December, 1908, to Boards of Guardians, Joint Committees, and Managers of Asylum and School Districts, by which, in order to afford facilities for the extension of administrative action for the prevention of tuberculosis, provision is made for the notification to the Medical Officers of Health of Sanitary Authorities of cases of pulmonary tuberculosis occurring among the inmates of Poor Law Institutions, or among poor persons under the official care of District Medical Officers, and for the taking of certain measures in such cases. It is interesting to note, as a fact in the evolution of public health principles in England and Wales, that the notification of tuberculosis in man is already permissible in Scotland and has been made obligatory quite recently in Ireland, while tentative action only is regarded as possible in the case of the predominant partner of the United Kingdom. But such as this action is it cannot be disregarded, and the outcome of it is not likely to be inconsiderable. The notification under this new Order of the Local Government Board must be made within 48 hours after its first recognition of the symptoms of pulmonary tuberculosis in the case of a poor

person by, as the case may be, the Medical Officer of a Poor Law Institution or the District Medical Officer, and notification of any change of address of affected persons must be made by the Superintending Officer of a Poor Law Institution, or a Relieving Officer, to the Medical Officer of Health of the Sanitary District in which the intended destination of those persons is situate. It is quite likely that this action of the Local Government Board may prove to be the initial step towards the obligatory inclusion of human pulmonary tuberculosis as a notifiable disease under the Infectious Disease (Notification) Act, 1889, and it is important that the possibility of this should be recognised without delay. A further provision of the Regulations is to confer power on a District Council, on the advice of their Medical Officer of Health, to “ provide “ and publish or distribute in the form of placards, handbills, “ or leaflets, suitable summaries of information and instruc- “ tion respecting Pulmonary Tuberculosis, and the pre- “ cautions to be taken against the spread of infection from “ that disease.” It is to be hoped that extensive advantage will be taken of this permission, and it would be a further gain if there were such co-operation as to secure uniformity in the manner and style of summarised information so issued by respective District Councils. A movement is on foot now for the erection of a Sanatorium for the reception and treatment of cases of pulmonary tuberculosis in this County. Such an institution should prove of very great value in the treatment of incipient cases of phthisis, and in inculcating habits and methods of management of their personal disabilities in those patients who are admitted for limited periods. The educational benefit of the institution on the community should be very considerable. It is to be hoped, therefore, that it will receive substantial support from the District Councils of the County, and that they will on their part all arrange for the disinfection of the homes and clothing

of tuberculous patients when requested to, and on the certificate of any medical practitioner in attendance on a case.

The total number of deaths registered in the Administrative County as due to Phthisis during the year 1908 was 207, and these were distributed as follows :—110 belonged to the Combined Urban Districts, and 97 to the Combined Rural Districts. The number which occurred in the Berry Wood Asylum of persons belonging to the Administrative County was 11 as against 10 in the year 1907, and these have been allocated in proper manner to the Districts from which they came. Of the total deaths from Phthisis, 4 were of children under five years of age, or 1.93 per cent. of the total deaths from this disease, as against 4.08 per cent. in 1907, 3.76 per cent. in 1906, 3.03 per cent. in 1905, 0.49 per cent. in 1904, 2.74 per cent. in 1903, 3.27 per cent. in 1902, 2.8 per cent. in 1901, 5.02 per cent. in 1900, 5.34 per cent. in 1899, 9.6 per cent. in 1898, 5.85 per cent. in 1897, and 8.15 per cent. in the year 1896. The child death-rate from this disease was lower in 1908, therefore, than in the preceding twelve years, with the exception of the year 1904. This is a very satisfactory feature, as indicating greater care of child-life ; but it is regrettable that there should be an increase in adult mortality from the disease, as is also the fact that the only district which had no mortality from Phthisis was the Crick Rural District.

The following table shows the number of deaths from phthisis, and the rate per 1,000 of the population for the whole Administrative County for the ten years 1899-1908 :—

Area.	Phthisis	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908
Administrative County	No. of Deaths.	243	219	178	214	182	204	165	186	196	207
	Rate per 1,000	1.19	1.06	0.85	1.01	0.85	0.95	0.76	0.85	0.90	0.95

The following references to this disease-mortality in the Annual Reports will be found to be of interest :—

HIGHAM FERRERS BOROUGH.—“ There were 2 deaths
 “ from phthisis during the year, which gives a death-rate
 “ for this disease of 0.6 per 1,000, which is low. It should
 “ be stated that in both cases the persons did not belong
 “ to the town, and were suffering from the disease when they
 “ came to reside here.”

DESBOROUGH URBAN.—“ It is satisfactory to find that
 “ the mortality from this dire disease presents a decline,
 “ though slight when compared with the figures 5 and 1.23
 “ respectively of the previous year ; but unfortunately the
 “ present manifestations of this malady among members
 “ of the local community do not furnish strong grounds
 “ for predicting any very marked improvement in the im-
 “ mediate future. . . . It has been the practice in this
 “ district for some years past to have the sick rooms of those
 “ dying from Consumption disinfected free of charge, but
 “ unfortunately owing to the absence of a Steam Disinfector
 “ the clothing has not always been efficiently dealt with at
 “ the time. Reference might here appropriately be made
 “ to the Public Health (Tuberculosis) Regulations 1908,
 “ of the Local Government Board, which provide that Poor
 “ Law cases shall be notified to the Medical Officer of Health
 “ of the district. If the information thereby obtained is to
 “ prove of that benefit to the public health aimed at by
 “ these Regulations, it is very necessary that there should be
 “ at the command of your officials a Steam Disinfector, which
 “ I would urge upon you to obtain at the earliest
 “ opportunity.”

FINEDON URBAN.—The Sanitary Inspector reports that
 he has disinfected “ three houses in which deaths from
 “ Phthisis had occurred.”

IRTHLINGBOROUGH URBAN.—“ Although the death rate
 “ is considerably lower than last year it would be unwise
 “ to conclude that the disease is less prevalent ; such is not
 “ true, as there are at present, in the town, a considerable
 “ number of cases in all stages of the disease, and nearly all
 “ of them in men and women between 20 and 35 years of age.
 “ As a good many of the cases have no tubercular family
 “ history (and the same remark applies equally to past fatal
 “ cases) it is reasonable to conclude that the disease has been
 “ contracted by infection—in all probability in the factory.
 “ Many of the cases, particularly married men, continue to
 “ work much longer than they ought, in order that they
 “ may maintain their families. While at work, under modern
 “ factory conditions—aggregation of operatives, working at
 “ continual high pressure, the presence of dust, in many
 “ instances inefficient ventilation, badly regulated working
 “ hours—such men are a continual source of infection to their
 “ fellow-workmen. . . . The transmissibility of
 “ consumption by milk, and the consumption of tuberculous
 “ meat, is a question of Public Health, which in many
 “ country districts does not receive the attention it deserves.
 “ In view of its importance I would strongly advise the
 “ Council to exercise whatever power it may or can possess
 “ in appointing a Veterinary Surgeon to periodically inspect
 “ all dairy cows in the district, or in any other district from
 “ which milk is brought and sold in the town.”

KETTERING URBAN.—“ The year 1908 shows the highest
 “ death-rate from Phthisis and other Tubercular diseases
 “ during the last 20 years, forming 15.3 per cent. of the total
 “ deaths in 1908. Your Authority, like others, is thoroughly
 “ alive to this important question. . . . On December
 “ 18th the Local Government Board sent out a circular on
 “ ‘ PublicHealth(Tuberculosis) Regulations, 1908,’ embodying
 “ everything that Dr. Newsholme had stated at Washington,

“ and which comes into force on January 1st, 1909.
 “ These regulations will, undoubtedly, entail a certain amount
 “ of extra work on your officers, but I feel sure everyone
 “ will gladly do what they can to carry out these excellent
 “ Regulations. Your Authority will heartily endorse these
 “ Regulations, in view of the fact that so recently as October
 “ 1st, at a full meeting of the Urban Council, it was unani-
 “ mously agreed to ask the Local Government Board for
 “ power to make Pulmonary Tuberculosis compulsorily
 “ notifiable in Kettering. The step is in the right direction,
 “ and in the course of time I have no hesitation in stating
 “ it will be applied to the whole community. In Scotland
 “ many towns are adopting compulsory notification of Phthisis,
 “ and in Ireland it will be in force shortly, as the Chief
 “ Secretary has brought in a Bill for the Prevention of
 “ Tuberculosis, and in that Bill one of the Clauses states that
 “ Pulmonary Phthisis shall be compulsorily notifiable.
 “ At a recent meeting of the Kettering Board of Guardians it
 “ was stated that it might be desirable to invite other Boards
 “ of Guardians to send their Phthisical patients to Kettering.
 “ Would it not be possible for the Guardians to allow patients
 “ from Kettering, who are not in receipt of parochial relief,
 “ to be taken into Phthisical wards at a small weekly pay-
 “ ment ? The people of the town should be considered first.
 “ I understand the Friendly Societies’ Council have applied
 “ for information regarding this matter, and it is worthy of
 “ serious consideration, seeing the people who suffer the
 “ most from this dire disease have, through their repre-
 “ sentatives—the Friendly Societies—actually taken the
 “ matter up, surely there could be no harm in the Guardians
 “ applying to the Local Government Board for permission
 “ to take these deserving cases into their Phthisical wards.
 “ . . . In the meantime, your Officers disinfected any
 “ rooms or houses when asked by Doctors or ratepayers
 “ where there is a person suffering from Phthisis, and if

“ death occurs, they call and offer to thoroughly disinfect
 “ the rooms, etc. Cards were printed last year on the
 “ Prevention of Consumption, and whenever possible these
 “ cards have been left at the houses.”

RAUNDS URBAN.—“ The number of deaths from Pul-
 “ monary Tuberculosis was 8. This is very much above the
 “ average for England and Wales, and much above the
 “ average in this District. Six of the 8 were males and 2
 “ were females, all died at working age, the exact ages being
 “ 19, 21, 23, 24, 25, 32, 37, and 42. At least four of these
 “ were under treatment from 7 to 12 years, and most of the
 “ others from 1 year to about 3 years. I have also had 5
 “ cases under treatment at various Sanatoria during the year,
 “ all of whom have been very much benefitted and are now
 “ doing well and working. There is no doubt that the open-
 “ air treatment properly carried out is the most successful
 “ ever yet tried, and the endeavours of Dr. Hichens, of
 “ Northampton, to raise a sufficient amount of money to
 “ build and equip an open-air Sanatorium for this County,
 “ deserves the greatest encouragement from all sources.”

ROTHWELL URBAN.—There were six deaths from phthisis.
 “ When a death has occurred from Phthisis disinfection of
 “ the room by formalin vapour has been carried out where
 “ possible.”

RUSHDEN URBAN.—“ Fourteen voluntary notifications
 “ of Consumption have been received from Medical Practi-
 “ tioners, and all houses in which deaths have occurred
 “ and which have been brought to the notice of the Depart-
 “ ment have been fumigated with the consent of the owners.”

KETTERING RURAL.—“ Ten persons have succumbed to
 “ this disease, compared with 13 last year. I am still much
 “ disappointed with the result of the voluntary notification

“ adopted now two years ; 3 cases only were notified me
 “ during the year, and although the new Local Government
 “ Board Order that all “ poor persons ” are to be notified
 “ when suffering from Phthisis, I would urge the Board as
 “ soon as possible to extend the Order to all persons suffering
 “ from this disease. In my last report I suggested as an
 “ alternative to notification by medical attendant, that the
 “ Registrar of Deaths should be provided with printed and
 “ stamped post cards addressed to the Medical Officer of
 “ Health, asking that the room or rooms should be dis-
 “ infected free of charge whenever a death from Phthisis was
 “ registered ; this card could be given to the friends of
 “ deceased, who would gladly fill it up and post it, and then
 “ *all rooms* could be disinfected, instead of a very small por-
 “ tion. Up to now, however, this has not been acted
 “ upon. I would wish to draw the attention of the Council
 “ and the Local Government Board to the fact that the
 “ beautiful Sanatorium, erected by the Guardians at great
 “ expense to help to check this scourge of Consumption,
 “ is not as useful as it might be owing to the regulations of
 “ admission whereby, until the unfortunate victim is entirely
 “ without means and has run out of his Club, he cannot gain
 “ admission. In the meantime, what was an early and
 “ curable disease becomes a hopeless and incurable one,
 “ and as a result the efficiency of the Sanatorium treatment
 “ is doubted. Of 20 beds, during the last three months only
 “ 4 have been occupied. I am aware that under the present
 “ Local Government Board regulations the Guardians are
 “ legally prevented from admitting any but paupers to a
 “ Sanatorium built under the Poor Law, but surely in a case
 “ of this kind some exceptions could be made by the Local
 “ Government Board authorities whereby the Sanatorium
 “ portion of the Infirmary could be thrown open to the whole
 “ district without the patient being of necessity a pauper.
 “ We have everything under the most favourable conditions

“ for treatment, and the Sanatorium would be full in a few
 “ weeks if only we could get the early cases in without making
 “ them paupers.”

WELLINGBOROUGH RURAL.—“ Phthisis has caused 12
 “ deaths. . . All the houses have been disinfected after
 “ death, and every means to prevent contagion adopted.”

The Phthisis death-rate varied in the Urban Districts from 0.41 per 1,000 of the population in the Oundle District to 1.85 per 1,000 of the population in the Raunds District. In the Rural Districts the variation in this mortality was from 0.00 per 1,000 of the population in the Crick District to 1.40 per 1,000 of the population in the Potterspury District.

Arranged in the order of their Phthisis death-rates, the Urban Districts stand thus :—

	<i>Per 1,000 of Population.</i>		<i>Per 1,000 of Population.</i>
Oundle	0.41	Irthlingborough ..	0.85
Higham Ferrers Boro' ..	0.68	Wellingborough ..	0.95
Rushden	0.72	Desborough	0.97
Finedon	0.74	Rothwell	1.18
Daventry Borough ..	0.79	Kettering	1.46
Brackley ,, ..	0.81	Raunds	1.85

The position of the Rural Districts in respect of their Phthisis death-rates is as follows :—

	<i>Per 1,000 of Population.</i>		<i>Per 1,000 of Population.</i>
Crick	0.00	Brixworth	0.93
Thrapston	0.50	Northampton	0.93
Towcester	0.50	Wellingborough ..	0.93
Daventry	0.59	Oxendon	0.95
Gretton	0.67	Oundle	1.13
Middleton Cheney ..	0.82	Hardingstone	1.27
Brackley	0.83	Easton-on-the-Hill ..	1.36
Kettering	0.84	Potterspury	1.40

Respiratory Diseases Mortality.—The mortality from the respiratory diseases in the County during the year 1908 amounted to 352, as against 387 in the year 1907, and an average of 386 for the 10 years 1898-1907. The mortality for the first 5 of these years, however, showed an average of 420, while the average for the later period of 5 years was only 352—the same rate as recorded for 1908. It is to be noted in connection with the figures for 1907 and 1908 that measles prevailed and was more fatal in the former than in the latter year. In the year 1907 the rate of mortality on the respiratory diseases was 1.88 per 1,000 of the population; in 1908 the like rate was 1.61 per 1,000 of the population. This last rate is less, however, than the average for the ten years 1898-1907, which was 1.83, and for the first five of these years, which was 2.04, and also slightly less than the average for the past period of five years, which was 1.63 per 1,000 of the population. Of the deaths which occurred, 139 belonged to the Combined Urban Districts, and 213 to the Combined Rural Districts, after allocating to their respective districts the 4 deaths which occurred in Berry Wood Asylum. Of the total deaths from Bronchitis, Pneumonia, and Pleurisy, 37.21 per cent. were of children under 5 years of age; of these, 79, or 60.3 per cent. were in the Combined Urban Districts, and 52, or 39.7 per cent. were in the Combined Rural Districts.

The following table shows the number of deaths from the respiratory diseases, and the rate per 1,000 of the population for the whole Administrative County for the ten years 1899-1908 :—

Area.	Respiratory Diseases.	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908
Administrative County	No. of Deaths	467	450	337	415	359	354	354	305	387	352
	Rate per 1,000	2.29	2.18	1.62	1.97	1.68	1.65	1.63	1.40	1.78	1.6

The death-rate for Respiratory Diseases varied in the Urban Districts from 0.40 per 1,000 of the population in the Brackley Borough to 2.97 per 1,000 of the population in the Finedon District. In the Rural Districts the variation in this mortality was from 0.97 per 1,000 of the population in the Brackley District, to 3.80 per 1,000 of the population in the Oxendon District.

Arranged in order of their death-rates for Respiratory Diseases the Urban Districts stand thus :—

<i>Per 1,000 of Population.</i>				<i>Per 1,000 of Population.</i>			
Brackley Borough ...	0.40			Kettering ...	...	1.37	
Oundle ...	0.41			Raunds ...	...	1.38	
Daventry Borough ...	1.05			Desborough ...	...	1.45	
Irthlingborough ...	1.07			Wellingborough ...	...	1.47	
Rothwell ...	1.18			Higham Ferrers Boro'	...	1.71	
Rushden ...	1.25			Finedon ...	...	2.97	

The position of the Rural Districts in respect of their death-rates for Respiratory Diseases is as follows :—

<i>Per 1,000 of Population.</i>				<i>Per 1,000 of Population.</i>			
Brackley ...	0.97			Middleton Cheney ...	...	2.07	
Northampton ...	1.12			Wellingborough ...	...	2.08	
Hardingstone ...	1.40			Oundle ...	...	2.27	
Potterspury ...	1.40			Brixworth ...	...	2.53	
Thrapston ...	1.40			Gretton ...	...	2.71	
Towcester ...	1.40			Easton-on-the-Hill ...	...	3.42	
Kettering ...	1.53			Crick ...	...	3.57	
Daventry ...	1.71			Oxendon ...	...	3.80	

General Zymotic Mortality.—I was able in my last Annual Report to shew that the rate of general zymotic mortality for the County in 1907 was more satisfactory than for any one

of the 10 years preceding it ; for the year 1908 the rate is only fractionally higher than that for 1907. The total number of deaths, inclusive of those from Measles, Whooping-cough, and Diarrhœa, which are not notifiable diseases, but not including Simple Croup, Epidemic Influenza, or Enteritis, amounted to 150, of which 86 deaths occurred in the Combined Urban Districts, and 64 in the Combined Rural Districts.

It is to be noted, however, on reference to the Chart, that the rates of notifiable sickness and mortality therefrom for the year 1908 are lower both as against the like rates for 1907 and the averages for the preceding eight years, and that the slightly increased total zymotic mortality was occasioned by the fatality of the non-notifiable disease—Whooping-cough.

The general zymotic mortality rate for the year 1908 was 0.68 per 1,000 of the population, as against 0.62 in 1907, and 0.81 in 1906. The mortality rate from the notifiable diseases amounted to 0.22 per 1,000 of the population, as against 0.26 for the years 1906 and 1907, 0.40 per 1,000 in 1905, 0.38 per 1,000 in 1904, 0.26 per 1,000 in 1903, 0.27 per 1,000 in 1902, 0.36 per 1,000 in 1901, and 0.41 per 1,000 in 1900. The total number of cases notified was 1,067, as against 1,240 in 1907, 1,223 cases in 1906, 1,866 cases in 1905, 1,598 cases in 1904, and 913 cases in 1903, which is at the rate of 4.89 cases per 1,000 of the population ; of these cases, 48 were fatal, as against 58 in 1907.

Of the total deaths from the zymotic diseases 109 were of children under five years of age, or at the rate of 72.66 per cent. ; of these, 67, or 61.47 per cent. were in the Combined Urban Districts, and 42, or 38.53 per cent. were in the Combined Rural Districts.

The following table shows the number of deaths from the general zymotic diseases, and the rate per 1,000 of the population for the whole Administrative County, for the ten years 1899—1908 :—

Area.	General Zymotic Diseases.	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908
Adminis- trative County.	No. of Deaths.	255	217	187	162	154	203	195	176	135	150
	Rate per 1,000	1.25	1.05	0.90	0.77	0.72	0.94	0.90	0.81	0.62	0.68

The general zymotic death-rate varied in the Urban Districts from 0.00 per 1,000 of the population in the Boroughs of Brackley and Higham Ferrers to 1.21 per 1,000 of the population in the Desborough and Kettering Districts. In the Rural Districts the variation in this mortality was from 0.00 per 1,000 of the population in the Crick, Easton-on-the-Hill, and Gretton Districts, to 1.87 per 1,000 of the population in the Northampton District.

Arranged in order of their death-rates for Zymotic Diseases the Urban Districts stand thus :—

<i>Per 1,000 of Population.</i>				<i>Per 1,000 of Population.</i>			
Brackley Borough ...	0.00			Wellingborough ...	0.57		
Higham Ferrers Boro' ...	0.00			Irthlingborough ...	0.64		
Finedon ...	0.24			Rothwell ...	0.99		
Daventry Borough ...	0.26			Rushden ...	1.18		
Oundle ...	0.41			Desborough ...	1.21		
Raunds ...	0.46			Kettering ...	1.21		

The position of the Rural Districts in respect of their death-rates for Zymotic Diseases is as follows :—

<i>Per 1,000 of Population.</i>			<i>Per 1,000 of Population.</i>		
Crick	...	0.00	Daventry	...	0.52
Easton-on-the-Hill	...	0.00	Wellingborough	...	0.57
Gretton	...	0.00	Thrapston	...	0.70
Kettering	...	0.07	Oxendon	...	0.71
Brackley	...	0.13	Middleton Cheney	...	0.82
Brixworth	...	0.25	Hardingstone	...	0.89
Potterspury	...	0.40	Towcester	...	1.00
Oundle	...	0.48	Northampton	...	1.87

SPECIAL ZYMOTIC DISEASES AND MORTALITY.

Small Pox.—There was again no record of this disease in the County, but, as will be shown later on, the inhabitants are becoming less and less protected against the risks of infection from it.

Scarlet Fever.—It is a great satisfaction to be able to record that there was a distinct diminution in the prevalence of Scarlet Fever during the year 1908 as compared with the preceding year. At the same time the prevalence was considerable, and greater than might have been reasonably expected would have been shewn. As a matter of fact, however, the extensive epidemic of the disease in the two Kettering Districts, which had been so marked a feature of the year 1907, had not materially abated in either of those districts at the commencement of the year 1908. I pointed out in my Report for the year 1907 that the proportionate contribution of scarlet fever by the two Kettering districts amounted to 65.1 per cent. of the total cases of scarlet fever notified in the County during that year ; the proportion contributed by the same districts in 1908 amounted to only 38.6 per cent. of the total cases notified, and thus it will be seen that the scarlet

fever distribution throughout the County was of a more general nature in the year 1908 than was the case in 1907. It is pleasing, however, to be able to record that the mortality from scarlet fever was small in amount, pointing to a greater mildness of the disease. In several of the districts it was quite plain that the disease had been imported into them from either the Borough of Northampton, or from outside the County of Northampton altogether. During the year 1908 there were 715 cases of this disease in the Administrative County, against 920 cases in 1907, 871 cases in 1906, 1,475 cases in 1905, 1,127 cases in 1904, 495 cases in 1903, 602 cases in 1902, 570 cases in 1901, and 816 cases in 1900. Of the total cases during 1908, 418 occurred in the Combined Urban Districts, and 297 in the Combined Rural Districts. The total scarlet fever prevalence was equal to a sickness-rate of 0.32 per cent. of the population, as against 0.42 per cent. in 1907, 0.40 per cent. in 1906, 0.68 per cent. in 1905, 0.52 per cent. in 1904, and 0.23 per cent. in 1903. In the Combined Urban Districts the rate was 0.41 per cent. as against 0.54 per cent. in 1907, 0.34 per cent. in 1906, 0.84 per cent. in 1905, and 0.55 per cent. in 1904, and in the Combined Rural Districts it was 0.25 per cent. as against 0.32 per cent. in 1907, 0.45 per cent. in 1906, 0.54 per cent. in 1905, and 0.50 per cent. in 1904. The total number of deaths from scarlet fever in the Administrative County during 1908 was 5, or 0.69 per cent. of the cases, as against 2.60 per cent. in 1907, 2.29 per cent. in 1906, 2.70 per cent. in 1905, 2.57 per cent. in 1904, 3.03 per cent. in 1903, 1.82 per cent. in 1902, 1.57 per cent. in 1901, and 1.96 per cent. in 1900. Of these deaths, 1 or 20.0 per cent. were of children under five years of age, as against 37.5 per cent. in the year 1907, and 50.0 per cent. in the years 1905 and 1906. No death from Scarlet Fever occurred in any of the Rural Districts. No case of Scarlet Fever was notified in Higham Ferrers Borough, or in the Crick and Easton-on-the-Hill Rural Districts.

The following are extracts from the Reports of the District Medical Officers of Health :—

DESBOROUGH URBAN.—“ Six cases of Scarlet Fever were notified during the year and one of these proved fatal. These cases, which infected five houses, were notified as follows :—One in April, three in May, and two in July. . . . The fatal case in a child 4 years of age was at the outset of a very virulent type, and death took place at a very early stage of the disease. It occurred in a dwelling where only the merest apology for isolation could be attempted owing to the scarcity of accommodation and free communication between the two bedrooms at disposal ; but notwithstanding these facts and the presence of plenty of susceptible material in the house there was no extension of the disease from this source.”

FINEDON URBAN.—“ Ten cases of Scarlet Fever were notified during the year, but the disease never became epidemic, and no deaths resulted. Credit must be given to the occupiers of the infected houses for the care they took to prevent the disease spreading. The sources of the infection were Kettering and Burton Latimer.”

IRTHLINGBOROUGH URBAN.—“ The first case occurred on June 8th in a boy named Thornycroft, living in Park View ; the family had only been resident in the town about 10 days when he fell ill, and when I saw him on the 3rd day of his illness he was unconscious and died within a day or two from the malignant type of the disease. At my first visit I examined the other children of the family and found several of them peeling, and in quick succession all the other children developed the disease—9 altogether. The source of the infection could not be satisfactorily explained. There was no history of the disease in the

“ district in which the family lived prior to coming here.
 “ It is not improbable that the infection was caught on the
 “ journey—by train—or it is possible, that as there had been
 “ a case two years previously in the house (in Irthlingborough)
 “ that the infection may have lingered there, as it may do,
 “ and attacked a family evidently peculiarly susceptible
 “ to the disease. The majority of the other cases were in
 “ children attending one or other of the Schools, and as in
 “ several instances a good many belonged to one class, it is
 “ reasonable to suppose that one or more unsuspected and
 “ undetected cases were attending school all the time. I
 “ repeatedly visited the schools and examined many of the
 “ children, but failed to discover the source of infection.
 “ The head teachers, acting on my instructions, very kindly
 “ kept a strict look out for ailing children ; these were sent
 “ home and I was notified, and they were not allowed to
 “ return to school until I had certified them as being free
 “ from infection.”

KETTERING URBAN.—There were 190 cases of Scarlet
 Fever notified. “ Of these notified cases, one was found to
 “ be suffering from Cerebro-Spinal Meningitis, and died in
 “ the Isolation Hospital, and this did not come to my know-
 “ ledge until I received the Registrar’s returns a week later.
 “ Although there have not been so many cases notified in
 “ 1908 as in 1907, Scarlet Fever has been pretty generally
 “ distributed throughout the town, the Southern Ward
 “ having the smallest number of cases. As I discussed
 “ Scarlet Fever fully in last year’s report, it is unnecessary
 “ for me to dwell on it on this occasion. . . . In
 “ 12 houses, where 1, 2, and 3 cases of Scarlet Fever were
 “ promptly removed to Hospital, 34 children were left who
 “ had not had the disease, and would therefore be considered
 “ susceptible. None of these have taken the disease. To show
 “ the usefulness of the Isolation Hospital, notwithstanding

“ the number of Scarlet Fever cases in the town, in
 “ only two houses where the first case was promptly
 “ removed to the Hospital did a second case occur. One
 “ naturally expected this year to get what are known as
 “ recurrent cases ; by that is meant fresh cases appearing
 “ after a certain lengthened period had elapsed since the
 “ previous case, and I have to record the fact that three
 “ such cases have occurred. . . . These three cases
 “ indicated that there may have been some failure on our
 “ part to disinfect the rooms, bedding, and clothing, or on
 “ the part of the parents not giving up every article of
 “ infected clothing to be disinfected. It was thought that
 “ there were 3 ‘ Return cases.’ Regarding the first of these
 “ ‘ return ’ cases, it is questionable whether it should not be
 “ included under the recurrent cases as being due to failure in
 “ disinfection. An interesting point arises in connection
 “ with it, because last year the parents lived in a different part
 “ of the town, and they were prosecuted for exposing a
 “ child in a peeling state in the public streets, and a con-
 “ viction was secured. In the second case nothing could be
 “ found to account for the return case. With the third case
 “ your Inspector, on making enquiries after the second case
 “ had been notified, found that the child who had been
 “ discharged from the Hospital was perfectly well for some
 “ days after its arrival home, but owing to the changeable
 “ weather it had developed a severe cold, and that it had
 “ left a discharge from the nostrils. It is very gratifying to
 “ record that only three cases can be classified as ‘ return ’
 “ cases, and it speaks well for the care that the patients
 “ receive at the Isolation Hospital. These return cases will
 “ occur from time to time, no matter how long the patients
 “ may be detained in Hospital. It is a difficulty that affects
 “ every Sanitary Authority throughout the country, and one
 “ has to bear in mind that if these Hospital cases had been
 “ treated at home and not been removed to Hospital, they

“ might equally have been the cause of a second case occurring
 “ after their release from isolation. We had a typical
 “ example of this in 1907 in a house in the Eastern Ward,
 “ when two children were isolated at home, and after the
 “ house had been disinfected and the two children allowed to
 “ mix with the others, another case was notified. One
 “ prosecution was undertaken against parents for failing
 “ to notify, and a conviction secured.”

RAUNDS URBAN.—“ The Scarlet Fever cases were
 “ scattered over the whole year, and at no time was there
 “ anything of an epidemic. All the cases were of a very
 “ mild type and no deaths occurred.”

ROTHWELL URBAN.—“ Seventeen cases were notified
 “ during the year. There were no deaths.”

RUSHDEN URBAN.—“ Forty-four cases were notified,
 “ six being under five years of age. All these cases must
 “ have been of an exceedingly mild character as no deaths
 “ have been recorded.”

WELLINGBOROUGH URBAN.—“ The epidemic of Scarlet
 “ Fever began in October, when there were 29 cases notified
 “ followed by 31 cases in November, and 27 cases in Decem-
 “ ber. The total with those in the early part of the year
 “ was 101. Every precaution was taken, but in several cases
 “ the notifications were not sent in until the patient was in a
 “ state of desquamation, and it was almost impossible to
 “ trace the origin or tell how many had contracted the disease
 “ from these cases. Eleven cases were imported, 31 arose
 “ from direct contagion, 37 seem to have been contracted
 “ at school, while in 11 the source of infection was untrace-
 “ able.”

BRIXWORTH RURAL.—“Of the 28 cases, Holcot is responsible for 12, Moulton for 6, and Harleston for 5. Considering the great amount of Scarlet Fever there has been in Northampton, it is surprising there has not been more in the district. The disease has been of a mild type; there have been no deaths in the district.”

DAVENTRY RURAL.—“Scarlet Fever occurred in eight parishes; twelve cases in Floore, four cases in Long Buckby, three cases in Stowe-nine-Churches, Weedon and West Haddon, and two cases in Braunston, Staverton and Woodford-cum-Membris; nearly all these cases were mild, and none of them were fatal.”

GRETTON RURAL.—“Thirteen cases of Scarlet Fever came under observation. One of these occurred in the parish of Wakerley and twelve in Gretton. The earlier Gretton cases supervened on the arrival in the village of a girl who was employed at an Isolation Hospital. Within three or four days of her arrival home one of her brothers was attacked with what was taken to be rheumatic-fever. My subsequent enquiries satisfied me that this child really had Scarlet Fever, and on 28th July the case was notified as was also another in the same house. In the interim a case occurred next door, and three other households were infected, doubtless through school attendance. The school was promptly closed, and as no less than seven cases occurred in one cottage the employment of a nurse became essential. These steps, together with such routine measures as disinfection and general supervision, proved sufficient to prevent any further spread of the disease.”

HARDINGSTONE RURAL.—There were 7 cases of scarlet fever, “but fortunately this year it was of a much milder type and there was not a single death, whilst in the previous

“ year there were 4 deaths in 10 cases. One case occurred
 “ in Brafield Village, whilst the other six were in Harding-
 “ stone and Wootton villages. The Brafield case was sup-
 “ posed to be a case of Influenza, but after some time it was
 “ found to be peeling, so certified then as Scarlet Fever :
 “ it lived in a lone cottage, so was not taken to the hospital
 “ and there was no spread of the disease. The other cases
 “ could all trace their origin to contact with cases in other
 “ districts ; thus one case was contracted at Newport Pagnell,
 “ one at Northampton Barracks, one at Far Cotton, and the
 “ others at Northampton, where it has been very prevalent
 “ during the year. Five cases were removed to our Infectious
 “ Hospital and there treated.”

KETTERING RURAL.—“ Scarlet Fever still claims a large
 “ number of victims but it is of a very mild character ;
 “ 86 cases were notified with no death, compared with 155
 “ with 3 deaths last year ; this is a considerable improve-
 “ ment, especially when it is noticed that 42 cases came
 “ from one village—Burton Latimer—practically half the
 “ total number, 81 cases, having been notified from the same
 “ village during 1907. This epidemic, which we had hopes
 “ at the beginning of the year had disappeared, again started
 “ afresh amongst the females employed at the top floor
 “ of a large boot factory. About 60 girls are employed here,
 “ and in spite of all precautions 9 of these became infected,
 “ and no less than 20 others had a curious form of sore
 “ throat, which, I believe, was due to the same infection.
 “ I examined every girl in this factory on three occasions ;
 “ all who were found with sore throats were excluded from
 “ work, and the factory was twice thoroughly disinfected.
 “ It will be noticed that nearly all the cases were those
 “ between the ages of 10 and 20, the school children having
 “ mostly been victims during the 1907 epidemic. There have
 “ been no fresh cases notified since December 7th.”

Geddington.—"Twenty-eight cases were notified from here, mostly during the early part of the year. They were removed to Hospital as fast as they fell until it was full, the remainder being isolated at home, and by the end of March the epidemic was over. A few cases occurred in August; these were mostly removed to Hospital, and since September no cases have been notified from here. The schools were disinfected on three occasions." The remaining 16 cases occurred in six other villages.

NORTHAMPTON RURAL.—"Of the scarlet fever cases 14 were notified from Duston, and all during the months of October and November. Four families were attacked within a fortnight, several members of each family falling, and in each case the first member to fall could be traced to the infant department at Duston school. Here there were other children at school from St. James' End, Northampton, and there was a probable history of contact with cases of scarlet fever in that district, where the disease has lately been very prevalent. I ordered the infant department to be closed and the epidemic ceased at once. This department has only just been re-opened, and I have made a strong protest against children from St. James' End being admitted to Duston School. I am, however, told that by the rules of the Education Department such children cannot be excluded. If such is the case, it is a most mischievous and dangerous rule. For the last twenty years either Dallington or Duston Schools have had, one or other, almost yearly to be closed on account of children from the town introducing infectious disease into them, and what deaths can be traced to this source it would be difficult to say. It is rather a parody on the present day method of the Education Department that the height, weight and number of teeth of these children must be accurately recorded, whilst no steps are taken to prevent

“ such a dangerous source of infection as at present admit-
 “ tedly exists. To still more emphasize this view, two
 “ children in one family at New Duston were attacked with
 “ scarlet fever, and the first to fall had been attending St.
 “ James’ End School, where it evidently contracted the
 “ disease, as no other families in New Duston were affected.
 “ In Harpole there were five cases of scarlet fever in two families.
 “ One family had been visiting friends at Duston when the
 “ epidemic was at its height, but it was difficult to trace the
 “ source of contagion in the other family, as they had not
 “ been out of the village, neither had they been to school or
 “ visited the other children. Two cases occurred at Billing,
 “ the first case being brought into the village by visitors
 “ from a distance, it fortunately only spread to one other
 “ family, though at the time I feared it would spread con-
 “ siderably, as the disease was not recognised and properly
 “ isolated till it seemed almost too late to be of service ;
 “ of the other two cases one occurred at Weston Mill, and
 “ its origin was difficult to trace ; the other broke out at the
 “ Convalescent Home Lodge, and may have been introduced
 “ by visitors from the town, it was isolated carefully at home,
 “ and there was no spread. All these cases were treated at
 “ their own homes, except one which was removed to the
 “ Borough Hospital by a fortunate mistake, as it broke out
 “ in a house close to the Borough boundary and was at first
 “ thought to belong to the Borough.”

POTTERSPURY RURAL.—“ Thirty-six cases of scarlet
 “ fever, against five the previous year, were notified, all
 “ apparently of the usual mild type, unattended by mortality,
 “ and generally spread by unrecognised cases imported into
 “ the district. They do not call for any special comment.

THRAPSTON RURAL.—“ There were four cases of Scarlet
 “ Fever in two houses in Chelveston during August. I

“believe it was imported from outside the District. . .
 “A few cases of scarlet fever were seen at Ringstead during
 “the autumn, but did not give rise to much trouble.

TOWCESTER RURAL.—“Of the scarlet fever cases, 2 (in
 “one house) were in Slapton, 2 at Abthorpe, and isolated
 “occurrences at Foscote, Bradden, and Greens Norton.”

WELLINGBOROUGH RURAL.—“Thirty-three cases have
 “been notified, with no death. The disease must have been
 “of a mild type.”

Diphtheria and Membranous Croup.—The increased prevalence of diphtheria which I regretted to have to report on for the year 1907 was unfortunately maintained, owing to various circumstances, during the year 1908. It has to be stated that the total number of cases reported in 1908 was 107, with 26 deaths, as against 87 cases and 17 deaths in 1907, 53 cases and 11 deaths in 1906, 67 cases and 14 deaths in 1905, 77 cases and 19 deaths in 1904, 85 cases and 17 deaths in 1903, 105 cases and 20 deaths in 1902, 122 cases and 39 deaths in 1901, and 172 cases and 38 deaths in 1900. In the year 1908 the case incidence on the urban population was at the rate of 0.27 per 1,000 of the population, as against 0.33 per 1,000 in 1907, and on the rural population it was 0.67 per 1,000 of the population, as against 0.45 per 1,000 in 1907. In the Combined Urban Districts during 1908 there were 28 cases with 8 deaths, and in the Combined Rural Districts there were 79 cases with 18 deaths. The comparative severity of the cases is shown by the mortalities, which give a death-rate of 28.57 per cent. of the cases in the Combined Urban Districts, as against 26.47 per cent. in 1907, of 22.78 per cent. in the Combined Rural Districts, as against 15.09 per cent. in 1907, and of 24.29 per cent. in the whole Administrative County, as against 19.54 per cent. in 1907. No cases of Diphtheria

or Membranous Croup were notified in the Brackley and Higham Ferrers Boroughs, or in the Desborough, Finedon, Irthlingborough, Raunds, and Rothwell Urban Districts, or the Gretton and Kettering Rural Districts. Had it not been for the occurrence of 14 cases of diphtheria in the Rushden Urban District, the origin of which cases would appear, after investigation, to have been somewhat obscure, the Combined Urban Districts would not have shewn any special prevalence of the disease. It is, in fact, in the Rural Districts of the County that the disease has obtained any marked prominence, and in respect of this, notably in the Oxendon, Potterspury, Thrapston, and Towcester Districts. It will be seen, on perusal of the extracts from the reports of the district medical officers of health herewith appended, that in connection with the occurrence of several isolated outbreaks of the disease, serious local insanitary conditions were found, and that prevalence of the disease was occasioned in some instances by importation from outside the County. The history of diphtheria prevalence during 1908 is particularly remarkable, however, in respect of the recurrent outbreaks of the disease in the Parish of Thrapston. These recurrences of the disease gave rise to prolonged anxiety, which was only abated on the discovery, after patient watching and investigation by the Medical Officer of Health for the Thrapston Rural District, of what is known as a "carrier case," which was intermittently infectious. The facts in connection with this case, as stated by Dr. Elliott, are fully set out, and the justification of his opinion in regard to it, is to be found in the fact of the non-recurrence of diphtheria in the parish after its final isolation.

KETTERING URBAN.—There were 9 cases of Diphtheria notified. "In two of the houses in the Central Ward sanitary defects were found, which were promptly attended to. "It is pleasing to note that in 1908 we have had the fewest "number of notifications of this disease since 1900."

RUSHDEN URBAN.—“ Fourteen cases were notified, with
 “ four deaths (two under five). One case was not notified
 “ until the day after death. These cases have all occurred
 “ since the beginning of September commencing with two
 “ cases in one house in Beaconsfield Place. A remarkable
 “ feature of the outbreak is the fact that there seems to be
 “ no connection between the cases with the exception of the
 “ first two which occurred, and again 3 cases in one house in
 “ Moor Road. The drains of the properties concerned have
 “ all been examined and disinfection carried out. It has
 “ seemed impossible to trace a cause for the outbreak. On
 “ finding nothing to account for it at the house or the milk
 “ supply I turned my attention to the schools, but here again
 “ there seems to have been no connection between the cases,
 “ as they are, for the most part, attending different schools.
 “ I advised that the drains at Moor Road Schools should be
 “ tested, and this was carried out without any result. All
 “ the schools have been cleansed with disinfectants. A
 “ satisfactory feature of the outbreak is the exceedingly
 “ small death-rate.”

WELLINGBOROUGH URBAN.—“ There were three cases
 “ of diphtheria. One arose from a defective state of the
 “ drains, which have since been rectified ; in another case
 “ it was probably contracted away from the town, and in the
 “ third case there was no apparent cause.”

BRIXWORTH RURAL.—“ Two cases were notified, as
 “ against seven for 1907. Both cases were notified at the
 “ end of August and occurred in the same house, fortunately
 “ in an isolated spot some distance from the village of Old.
 “ The house was found to be dirty, overcrowded, and the drain
 “ outside the front door blocked; under these circumstances,
 “ it was not surprising at children contracting diphtheria.”

DAVENTRY RURAL.—“ Diphtheria occurred in four
 “ parishes ; single cases in Badby, Braunston, Farthingstone
 “ and Helidon ; the Farthingstone case was a very serious
 “ one and proved fatal, the other three cases were mild and
 “ all recovered.”

HARDINGSTONE RURAL.—“ Four cases of Diphtheria
 “ were notified during the year. One single case occurred
 “ at Hardingstone, but its origin could not be traced ; when
 “ first seen it seemed very severe and tracheotomy seemed
 “ probable, so it was at once removed to the Northampton
 “ General Hospital where it ultimately recovered, though
 “ the germs were discovered in the throat some time after
 “ he was comparatively convalescent. Two cases broke out
 “ almost simultaneously in Wootton, one of which proved
 “ fatal. The first case occurred in a visitor from Birming-
 “ ham, and from this the second child contracted the disease.
 “ Fortunately the Isolation Hospital was empty at the time
 “ so we moved the whole family into it till the cottage had
 “ been thoroughly cleaned and disinfected. The fourth case
 “ of Diphtheria occurred in Workhouse Yard at Milton and
 “ was very quickly fatal. This yard is never in a very
 “ sanitary state, but it was found that they had broken open
 “ and been using an old, filthy closet, and to this we attributed
 “ the outbreak. There was fortunately no spread of the
 “ disease.”

NORTHAMPTON RURAL.—“ Three cases of diphtheria were
 “ notified in Duston village at different periods. In each
 “ case faults could be found with the sanitary arrangements
 “ of the house, which were immediately remedied and there
 “ was no spread of the disease.”

OUNDLE RURAL.—There was one “ case of diphtheria
 “ contracted outside the district,” in addition to one at

Kingscliffe which is referred to in the Hospital section of this report. Besides these, “two severe cases of diphtheria occurred at a good class farm-house at Elmington. A careful examination of the drains showed a breakage into the ground and wall of a room on the ground floor used as a play room by the children. I believe this has been the cause of the disease. The children made a good recovery.”

OXENDON RURAL.—“There have been two small epidemics of diphtheria, four cases at Marston Trussell and four at Stoke Albany. . . The diphtheria at Marston Trussell was attributed to the defective drainage at the school which as I have mentioned has been rectified. No cause was detected for the cases at Stoke Albany.”

POTTERSPURY RURAL.—“Twelve cases were notified in 1908, as against nil for 1906 and 1907, viz., two at Wicken and ten at Paulerspury. Diphtheria, like Scarlet Fever, appears to arise independently of sanitation, and to be spread by direct infection. I am satisfied the disease was held in check at Paulerspury, and the mortality almost nil, by the early and judicious use of Antitoxin serum by Dr. Linnell, both as a preventative and as a curative agent. Convalescents from Diphtheria appear to be capable of conveying infection for protracted periods, and it is desirable, therefore, especially in the case of convalescent school children, that bacteriological examination be made to test their freedom from infection. To facilitate this object, and for primary diagnostic purposes, many Councils subscribe to the Clinical Research Association, with the approval of the Local Government Board.”

THRAPSTON RURAL.—“Thrapston experienced a number of outbreaks of Diphtheria, commencing on February 14th, and terminating on October 17th. The cases were

“ not very numerous—sixteen in all, counting one at Denford
 “ and two at Islip—but the rapid mortality of some of the
 “ cases (five died out of the sixteen) has been the cause of
 “ considerable anxiety, not only to your Council, but all
 “ the inhabitants of the town. Thrapston had previously
 “ had practically no Diphtheria. A visitor to the place
 “ was seen in October, 1906, at a good-class house on the
 “ Huntingdon Road, the origin of which case is obscure, and
 “ another case occurred in July, 1907, at a house on the
 “ Midland Road. This latter was undoubtedly imported
 “ from Middlesboro’. I also take into account the fact that
 “ there was an extensive outbreak of Diphtheria at Lowick
 “ in the previous autumn, and the disease might easily have
 “ been imported from there. The first group of three cases
 “ was notified on February 14th, and one of these proved
 “ rapidly fatal. I at once visited the children, and found
 “ that one was a Workhouse child attending the Church
 “ School, and of the others one lived on the Market Road
 “ and the other on the Midland Road. I visited the Church
 “ School and found that all the children attacked were part
 “ of a group working in a class-room at the back. From the
 “ first I suspected the presence of a carrier case, that is, a
 “ child not ill, but bearing the germs about his person. I
 “ examined the children, but they seemed healthy with the
 “ exception of one boy R, who looked very delicate. The
 “ school-teacher told me that he never looked well and
 “ suffered from repeated attacks of eczema. The sanitary
 “ condition of the building was thoroughly gone into and
 “ found very good. At a subsequent time I had the floor of
 “ the class-room at the back taken up, to make sure there
 “ was no old drain or cess-pit underneath, but found
 “ nothing. No fault could be found in this respect. I
 “ advised that the school be closed for 14 days and thoroughly
 “ cleaned out. Nothing more was heard of this until April
 “ 25th, when a child in Halford Street died of Diphtheria after

“ a very short illness. She also came from the same class-
 “ room. Two older children in the same family and two in
 “ the next house also took the disease. I traced a connection
 “ between these cases and two others occurring at Islip at
 “ the same time. In June and July two cases occurred—
 “ also from the same class-room and the school then broke
 “ up for the holidays. The school re-opened in September,
 “ and in the middle of October a further series of five cases
 “ occurred. I again visited the school and found that this
 “ time the disease was present in a group of children in the
 “ large front room of the building. As my attention had
 “ been directed by an article in the “ British Medical Journal ”
 “ to the possibility of the skin acting as a carrier in Ecze-
 “ matous cases, I enquired after R. and found that he had
 “ been moved into the large room and formed the centre
 “ of this fresh group of Diphtheria cases. I at once excluded
 “ R. from the school ; and from that day there have been
 “ no more cases of Diphtheria. My first attempt to take a
 “ cultivation from R.’s skin was not a success as the Eczema
 “ was not ‘ running.’ ” The parents of this child afterwards
 “ moved to Ringstead and I again saw R. This time I was
 “ able to get a cultivation which I sent to the Clinical Research
 “ Association who reported that they found Diphtheria
 “ Bacillus in the swab sent. I advised that the boy be placed
 “ in a hospital and that his clothes be destroyed. In
 “ accordance with this advice he was sent to the Oundle
 “ Rural District Isolation Hospital, and I hope the result
 “ will prove satisfactory so far as the Diphtheria is concerned.
 “ I have traced every case to this source with the exception
 “ of one adult case on the Huntingdon Road. Another
 “ child who developed Diphtheria at Yarmouth immediately
 “ after leaving home and had had no connection with the
 “ school puzzled me considerably, but I found that the
 “ washing for the family was done by R.’s mother and there-
 “ fore there is something to connect this case with the others.

“ I believe this boy acted as a ‘ carrier case ’ intermittently
 “ and that when he had eczema he reinfected himself from his
 “ clothes. The same thing is seen in Eczematous persons
 “ who have once had erysipelas ; the next time they have
 “ eczema they will again have erysipelas unless the greatest
 “ care is taken to disinfect their clothing. The houses of the
 “ diphtheria patients were frequently visited by the Sanitary
 “ Inspector and myself. No fault was found with the houses,
 “ the majority of which were good cottages.”

TOWCESTER RURAL.—“ The number of cases of diph-
 “ theria is the prominent feature. They were distributed as
 “ follows : Silverstone 9, Towcester 3, Greens Norton 1,
 “ Abthorpe 1. The Silverstone outbreak commenced in the
 “ middle of September. The mother of the first three
 “ children affected had just previously been staying at
 “ Brixton where ‘ there were sore throats in the house ’ :
 “ these cases were mild and ran a favourable course. No
 “ further case was reported till November 6th, when there was
 “ a re-appearance in a much more virulent form, insomuch
 “ that of six children attacked between this date and the
 “ middle of December four of them died. The virus of
 “ diphtheria may remain latent for a long period and possibly
 “ this is what happened in this instance. The origins of the
 “ Greens Norton, Abthorpe, and Towcester cases were con-
 “ jectural and seemed to illustrate the fact that outbreaks
 “ of diphtheria occasionally occur in rural districts independ-
 “ ently of a pre-existing case.”

Enteric Fever.—It is a matter of great gratification to be able to point to the fact that the number of cases of enteric-fever occurring in the year 1908 was the smallest that had been notified in the past 12 years. The severity of some of the cases is shown, however, in a rather higher mortality from the disease ; but, inasmuch as there was no serious

epidemic due to polluted water supply, or other cause, affecting any district in common, the comparative smallness in the number of cases tends to raise the rate of mortality, owing to an absence of the proportion of mild cases customary in general outbreaks of the disease. The Boroughs of Brackley and Higham Ferrers, with the Finedon, Oundle and Rothwell Urban Districts, and the Brackley, Brixworth, Crick, Easton-on-the-Hill, Gretton, Kettering, Middleton Cheney, Northampton, Oundle, and Oxendon Rural Districts were all free from this disease in 1908, while the districts that suffered most were the Desborough and Kettering Urban Districts. These represent the largest number of Districts showing freedom from enteric fever that I have been able ever before to record. The total number of cases during 1908 amounted to 37 in the Combined Urban Districts, and to 22 in the Combined Rural Districts, or 59 in all, as against 77 cases in 1907, 99 cases in 1906, 90 cases in 1905, 132 cases in 1904, 102 cases in 1903, 121 cases in 1902, 276 cases in 1901, and 141 cases in 1900. The total number of deaths from the disease was 9, as against 10 in 1907. Of these deaths, there were 5, or 13.51 per cent. of the urban cases, and 4, or 18.18 per cent. of the rural cases. The combined death-rate for the Administrative County was 15.25 per cent. of the total cases, as against 12.98 per cent. in the year 1907. The following references to this disease are to be found in the Annual Reports of the District Medical Officers of Health :—

DESBOROUGH URBAN.—“ Cases of Enteric Fever, this
 “ disease having been prevalent in the district at the end
 “ of 1907, continued to crop up during the months of January,
 “ February, March and October, with the result that
 “ a total of nine cases were notified against 43 for the
 “ previous year. Happily there was no mortality from this
 “ disease.”

IRTHLINGBOROUGH URBAN.—“ The two cases occurred
 “ in October in adjoining houses belonging to Mrs. Loveday,
 “ High Street. The first case was that of a man named
 “ Vorley, and the other was undoubtedly a contact one ;
 “ both made a good recovery. Town water is supplied to the
 “ houses, and all the drains are connected with the sewer,
 “ with the exception of one in front of the house, which was
 “ only supposed to be used for conveying storm water, but
 “ which admittedly had been so used up to the time of the
 “ outbreak for slop water as well.”

KETTERING URBAN.—There were eighteen cases of
 Enteric Fever notified. “ More cases have been notified
 “ during 1908 than in the last nine years. One of them,
 “ however, was a case of mistaken diagnosis : on death it
 “ was certified as Meningitis. . . . With the exception
 “ of the cases in Princes Street and Clarence Road all the
 “ houses were supplied with the town water. The well in
 “ Princes Street was a shallow well, and after a sample had
 “ been sent to the Clinical Research Association for chemical
 “ and bacteriological analysis, their report stating that it
 “ showed evidence of pollution, the usual notice was given
 “ to lay on the town’s supply.’ The well in Clarence Road
 “ was found to be satisfactory. With regard to the cases
 “ which occurred in one of the houses in Victoria Terrace,
 “ Balfour Street, and Clarence Road, they seemed at first
 “ sight to have some connection with their employment, as
 “ they all worked at the same factory. Your Inspector
 “ immediately visited the factory and made a thorough
 “ examination of the premises, both with regard to the
 “ sanitary convenience and water supply, and he reported
 “ that the water supply was satisfactory, but the closets
 “ for the women were too few in number. The necessary
 “ notice has been served. The milk supply to the different
 “ houses was above suspicion, and as far as could be gathered

“ there had been no communication between the different
 “ patients, nor could the Inspector find any carrier case.
 “ During the autumn we have received complaints from various
 “ people in the Eastern Ward concerning the foul smelling
 “ condition of the brook that runs from Stamford Road to
 “ Mill Road, as well as the foul emanations from the manholes
 “ in the main thoroughfare between Lawson Street and
 “ Catesby Street. In some of the cases notified it was dis-
 “ tinctly stated to the Inspector that they had been infected
 “ by the manholes. . . . The sewers have been well
 “ flushed from time to time. The manholes complained of
 “ have been closed after inspection by your Surveyor and
 “ myself, and ventilating shafts put in suitable places.”

WELLINGBOROUGH URBAN.—“ The only case notified
 “ was imported.”

DAVENTRY RURAL.—“ Enteric Fever occurred in two
 “ parishes ; two cases in Long Buckby and a single case in
 “ Newnham. The two Long Buckby cases were very mild,
 “ they occurred in one house and, though I made a close
 “ inspection, I could find nothing to account for the out-
 “ break ; the case in Newnham unfortunately was fatal,
 “ it occurred in a man aged 59 and, on visiting his cottage,
 “ I found much to be desired in the sanitary arrangements
 “ of the house and yard.”

HARDINGSTONE RURAL.—“ Only one case of Enteric
 “ Fever was notified during the year, and this was at Roade.
 “ The man had been working away from home and came back
 “ with the disease, so its origin was doubtful. The closet
 “ next door was in a bad state but his own closet was in good
 “ order : both were cleaned out and the former drained in a
 “ more satisfactory manner. Unfortunately this case had
 “ a fatal termination.”

POTTERSPURY RURAL.—“ Five cases were notified
 “ against one in 1907. Four at Potterspury, namely,
 “ one due to leakage of sewage matter into the house well,
 “ and three in a small cottage with only one bedroom, in
 “ another part of the village, of obscure origin, as the bac-
 “ teriological examination of the water gave negative results,
 “ but it is very likely that two of the cases contracted the
 “ disease by direct infection in the cottage. The other case
 “ of Enteric occurred at Cosgrove, and was due to a foul
 “ blocked drain under the house with pipes not jointed and
 “ badly laid.”

THRAPSTON RURAL.—“ In October three cases of
 “ enteric-fever were seen at Brigstock, all in one house.
 “ . . . An imported case of enteric fever was also reported
 “ from Ringstead.” At Woodford also “ two cases of
 “ enteric fever were seen, not in any way connected with
 “ each other ; they both did well and there was no further
 “ trouble.”

TOWCESTER RURAL.—“ The origin of the case of enteric
 “ fever reported at Greens Norton I could not determine.
 “ There was a pump on the premises, the water from which
 “ was extremely filthy, and although it was stated it was not
 “ used, the pump was fastened up to prevent the possibility
 “ of its being so.”

Puerperal Fever.—The total number of cases of this
 disease in the Administrative County was 8 with 5 deaths,
 as against 7 cases with 2 deaths in the year 1907 ; 10 cases
 with 2 deaths in 1906, 13 cases with 8 deaths in 1905, 15 cases
 with 9 deaths in 1904, and 7 cases with 3 deaths in 1903.
 The number of cases in 1908 was less, therefore, than the
 average number for the preceding five years, though the
 number of deaths was unfortunately fractionally above the

average for the same period. Four of the cases of Puerperal Fever occurred in the practice of the Certified Midwives, or at the rate of 2.24 per 1,000 of the births attended by them ; but in no case did any blame attach to a midwife.

KETTERING URBAN.—Only 2 cases of puerperal fever were notified during the year. “ The first case occurred in “ January. The Lady Inspector made a thorough examina- “ tion of the premises, and on behalf of the County Medical “ Officer of Health I made a report. The condition of the “ house was very dirty. The w.c. and yard gully were “ blocked, and a week’s refuse was heaped up in an outhouse. “ This case was attended by a midwife, but no blame can be “ attached to her, as she had taken every precaution with “ regard to the disinfection of her hands and person and “ instruments, and had followed out the regulations laid “ down by the Central Midwives Board. The second case “ occurred in June, and nothing insanitary was found about “ the premises.”

DAVENTRY RURAL.—“ One case of puerperal fever “ occurred in Long Buckby and was fatal.”

NORTHAMPTON RURAL.—“ One case of puerperal fever “ was reported from Harpole, which was unfortunately fatal. “ Its origin was difficult to trace, as the midwife who attended “ the case was visited, and seemed to have scrupulously “ carried out her rules as to disinfection, etc., nor did she “ carry the disease to any other of her patients. Proper “ precautionary methods of disinfection were carried out.”

Erysipelas.—Although there can be shown an average abatement of this disease in the County, I am still of opinion that erysipelas might be a good deal less in statistical evidence if greater care were taken in regard to the notification of

individual cases. There were in all 149 cases notified in the Administrative County during 1908 with 3 deaths—one being under 5 years of age—as against 123 cases with 5 deaths in 1907, 167 cases and 4 deaths in 1906, 215 cases and 10 deaths in 1905, 247 cases and 6 deaths in 1904, 209 cases and 4 deaths in 1903, 187 cases and 6 deaths in 1902, 146 cases and 5 deaths in 1901, and 165 cases and 4 deaths in 1900. In the Combined Urban Districts there were 69 cases and 3 deaths, and in the combined Rural Districts 80 cases and no death. The percentage case-mortality, therefore, for the Combined Urban Districts was 4.34 as against 4.54 in 1907, and for the Combined Rural Districts 0.00, as against 3.79 in 1907. For the whole of the Administrative County the mortality was 2.01 per cent. of the cases, as against 4.06 per cent. in 1907, 2.39 in 1906, 4.6 in 1905, 2.4 in 1904, 1.91 in 1903, and 3.2 in 1902.

KETTERING URBAN.—There were 32 cases of Erysipelas notified during the year. “ The first case notified this year “ was in January, and the interesting point about it was that “ the patient had a previous attack in November of 1907. “ On investigation we found she had been wearing a shawl “ that had not been properly disinfected. Another case “ occurred in July where we had distinct evidence of con- “ tagion caught from another case. It is to be regretted that “ our efforts to keep down Erysipelas have not been so “ successful this year, and I agree with the County Medical “ Officer of Health about doubting the value of notification “ of this disease, unless more care is taken in notifying only “ well-defined cases : e.g., a case occurred in October where “ the patient had visited the doctor’s surgery four times “ before it was notified, and the Inspector reported that “ the doctor had never visited the house. From this “ it is at once seen how difficult it is for your officers to “ thoroughly disinfect the premises, as the patients are

“ allowed to go about the house, and are not confined to
 “ one room, as they ought to be in a well-defined case
 “ of Erysipelas.”

ROTHWELL URBAN.—“ Three cases were notified. There
 “ was one death.”

Measles.—It is a satisfaction to be able to record a very distinct decline in the mortality from this disease, and it would appear from the mortality returns that measles was greatly less prevalent in the County during 1908 than for several years past. The mortality from Measles in the year 1907 was shown in six Urban and six Rural Districts, while in 1908 such mortality is recorded as having occurred in only one District of the County, namely, the Kettering Urban. There were 10 deaths in all, as against 31 in 1907, 26 in 1906, 21 in 1905, 24 in 1904, 30 in 1903, 19 in 1902, and 32 in 1901. It will be seen, therefore, that the number of deaths for 1908 was very considerably below the average of 26 for the seven preceding years. Of the total deaths in 1908, all were of children under five years of age. There certainly do not appear from the reports of the Medical Officers of Health to have been many outbreaks of the disease during the year, but it is a satisfaction to know that no death occurred in any of the villages which were affected and that probably this happy result was due to more care being shewn in the treatment of the children by their parents. Warmth and protection from the risk of catching cold are the principal watch-words in the treatment of sufferers from measles, and it is to the neglect of these that so much of the mortality from the disease is due.

IRTHLINGBOROUGH URBAN.—“ Only a few cases occurred
 “ during the year—the first being an imported one.”

KETTERING URBAN.—“ Up to the month of September
 “ the town had been free from Measles. Then notices were
 “ sent to me by the teachers, principally from Stamford Road
 “ Infant School. The class rooms of this School were thoroughly
 “ disinfected each week end by your officers, and I am of the
 “ opinion that it did good. Unfortunately, other Infant
 “ Schools began to be attacked, which necessitated several
 “ of them being closed for 3 weeks. In every case the class
 “ rooms were disinfected. Your Lady Inspector has been
 “ indefatigable in visiting all these school cases, and leaflets
 “ have been left at each infected house.”

KETTERING RURAL.—“ During the last quarter of the
 “ year a very large number of cases of measles occurred,
 “ but they were of a mild nature and no deaths were regis-
 “ tered. In Rushton nearly every child was infected;
 “ the schools were closed for three weeks and disinfected.
 “ At Warkton and Cranford a similar epidemic arose in a few
 “ days, and there also the schools were closed and disinfected.”

OUNDLE RURAL.—Measles was prevalent in the villages
 of Nassington and Yarwell.

Whooping Cough.—As against the large reduction in
 mortality from measles, I have to record, unfortunately,
 an excessive mortality from that chief other infectious
 ailment of infancy—whooping-cough. There were severe
 epidemics of the disease in several parts of the county, and the
 total number of deaths amounted to 75, as against 19 in 1907,
 16 in 1906, 65 in 1905, 40 in 1904 and 1903, 64 in 1902, 29 in
 1901, and 46 in 1900. The prevalence of the disease, there-
 fore, in 1908, as judged by the mortality returns was excessive
 as compared with that for previous years, and there is very
 full evidence of this also in the reports of the District Medical
 Officers of Health. In regard to the deaths for the year

1908, 47 occurred in the Combined Urban Districts, and 28 in the Combined Rural Districts, all of which, with two exceptions, were of children under 5 years of age.

DESBOROUGH URBAN.—“ Whooping Cough was very
 “ prevalent during the months of February, March, and
 “ April, and was responsible for four deaths all below the
 “ age of 5 years. With the view of checking the extension
 “ of the disease the teachers at infant schools were advised
 “ to be on the outlook for any suspicious cases amongst
 “ the scholars and to exclude from school any of such char-
 “ acter ; besides, the parents or guardians of the infected
 “ children were requested to take such measures which would
 “ prevent the infection from spreading to children of other
 “ people. Although the advice thus tendered was loyally
 “ carried out by the great majority of those concerned, it
 “ is regrettable to have to state that a few parents regarded
 “ the malady so lightly, and were apparently so neglectful of
 “ their duties to the community, that they permitted their
 “ children to come into contact with others not infected, and
 “ thus scattered the germs broadcast in the public streets.”

KETTERING URBAN.—“ Throughout January and Feb-
 “ ruary, Whooping Cough was very prevalent, and in March
 “ it gradually subsided. In every case brought to our know-
 “ ledge the Lady Inspector visited the homes and advised
 “ the parents what to do, especially to send for their doctor
 “ if they had not already done so. At the same time a
 “ leaflet on Whooping Cough, pointing out its dangers, was
 “ left with the parents. The public are, I regret to say, still
 “ rather apathetic with regard to Whooping Cough and
 “ Measles, no doubt believing that they are principally
 “ diseases peculiar to children, and the sooner they have an
 “ attack the better. I have known of several cases where a
 “ healthy child has been put to bed with one suffering from

“ the disease, in the hope that the healthy one would
 “ take it and then all would be well. It will be your
 “ officer’s duty to try and prevail against this idea, and get
 “ parents to realise what risks they run by adopting such
 “ practices.”

ROTHWELL URBAN.—“ Several cases occurred in the
 “ middle of April, and by the end of May the disease threat-
 “ ened to become a severe epidemic. On the 30th of May
 “ the Victoria Infant School was closed for three weeks.
 “ The disease started among the children of this School, and
 “ later the children of the Church Infant School began to
 “ suffer. This latter school was closed on the 5th of June
 “ for a period of 19 days. There were 4 deaths from Whoop-
 “ ing Cough, ages 5 years, 16 months, 9 months, and 3
 “ months.”

RUSHDEN URBAN.—“ Fourteen deaths were notified,
 “ seven of which were under one year of age.”

WELLINGBOROUGH URBAN.—“ There were 10 deaths
 “ in the spring and early summer, all (except two) in children
 “ under one year of age.”

BRIXWORTH RURAL.—“ There was an extensive epidemic
 “ of Whooping Cough in Moulton in February and March ;
 “ Brixworth in March and April ; and Thornby in May.”

DAVENTRY RURAL.—“ Whooping Cough occurred in
 “ some of the parishes during the year ; there were three
 “ deaths from this cause, all in Infants, and took place at
 “ Everdon, Newnham, and Weedon.”

HARDINGSTONE RURAL.—“ There were three deaths from
 “ Whooping Cough in young children.”

NORTHAMPTON RURAL.—“ There were five fatal cases “ of Whooping Cough.”

WELLINGBOROUGH RURAL.—“ Six deaths have been “ registered.”

Chicken Pox.—The Hardingstone Rural District is the only one in the County in which this disease is notifiable, and the following report of the Medical Officer of Health for that District is the only one bearing on the subject for the year 1908. It is to be recorded, however, that no deaths are given as having occurred from this disease.

HARDINGSTONE RURAL.—“ The number of cases of “ Chicken Pox (26) was exactly the same as in the previous “ year. Eight were notified in the Hardingstone district, “ and eighteen in Brafield and Yardly Hastings villages.”

Diarrhœa.—Only 17 deaths occurred in the Administrative County during 1908, as against 27 deaths in 1907, and 76 deaths in 1906. They were distributed as follows :—Combined Urban Districts 6, and Combined Rural Districts 11. Of these numbers, all of the former and 9 of the latter were children under five years of age.

Influenza.—There was a greater prevalence of epidemic influenza during 1908 than for four or five years previous, and the mortality therefrom was correspondingly larger. There were in all 49 deaths from the disease during the year 1908, as against 36 deaths in 1907, 20 deaths in 1906, 21 deaths in 1905, 24 deaths in 1904, and 35 deaths in 1903. All the deaths in 1908 were, with two exceptions, of persons over five years of age. Of the total deaths, 21 occurred in the Combined Urban Districts, as against 12 in 1907, and 28 occurred in the Combined Rural Districts, as against 24 in

1907. There are very few references as to the prevalence of the disease to be found, however, in the reports of the District Medical Officers of Health.

DESBOROUGH URBAN.—“ Influenza came under observation throughout the whole of the year, and although on no occasion did the disease assume any great epidemic form it was primarily accountable for three deaths.”

NORTHAMPTON RURAL.—“ There was one fatal case of influenza.”

WELLINGBOROUGH RURAL.—“ Two deaths have occurred.”

SCHOOLS.

It is plain from the succeeding references that the subject of the condition of the public elementary schools in their districts is not lost sight of by the Medical Officers of Health, and those relating to defects were forwarded, on receipt of each report, to the Secretary of the Education Committee. It is noteworthy also that some limitation is being put on the routine closure of schools on account of the prevalence of infectious sickness, and that more effort is being made to check the spread of such disease by the exclusion of particular scholars or groups of scholars. The fact remains, however, that the difficulty of deciding on the public health requirements of a district in respect of school-closure remains much as it was, and that in regard to certain of the non-notifiable diseases—especially measles—it is impracticable to lay down definite rules for guidance. What is certain, however, is that, if the District Medical Officer of Health is to be furnished at the earliest possible date with the facts of suspicious illness in a school so as to enable him to take early action in

the interests of education and public health, he must have the assistance of school teachers as informants. It is not necessary that the teachers should be able to diagnose an infectious disease, but they ought to be able to recognise the early symptoms of the more common infectious diseases, such as heat of skin, shivering, headache and languor, vomiting, running at the eyes and nose, rashes on the skin, and sore throat. Suddenness of onset of any of these symptoms is a very suspicious circumstance, and children having any of them should be sent home at once, while a notification of the fact should be sent to the Medical Officer of Health for the district. The Medical Officer of Health, being furnished thus with very early knowledge of the occurrence of infectious disease in his district, has a chance of dealing with it before it has assumed epidemic proportions—particularly in the case of such a non-notifiable disease as measles.

HIGHAM FERRERS BOROUGH.—“ I am pleased to state
 “ that the sanitary arrangements of the Council Schools,
 “ which for a long time have been in an unsatisfactory con-
 “ dition, have recently been put into excellent order under
 “ the supervision of your Sanitary Officer.”

DESBOROUGH URBAN.—“ The public elementary schools
 “ of the district have been visited from time to time, and the
 “ sanitary conditions found to be satisfactory. At these
 “ schools the water used for drinking purposes is that derived
 “ from the town supply.”

IRTHLINGBOROUGH URBAN.—“ The Elementary Schools
 “ in the town are kept in an excellent state of cleanliness,
 “ and the sanitary conveniences are perfect. Ventilation is
 “ well attended to. The only complaint I have to make is in
 “ connection with one of the class rooms in the Council Mixed
 “ School. The teachers in this particular room complain of

“ a smell of sulphur, a similar taste in the mouth, and some-
 “ times headache and general lassitude. I think the ex-
 “ planation lies in the fact that the chimney connected with
 “ the furnace “ for heating purposes ” in which coke is burnt,
 “ discharges its smoke not far from the windows of the room,
 “ and, as the chimney is low and surrounded on all sides by
 “ buildings, there is not a sufficient current of air to drive it
 “ away quickly enough, so that it gains entrance by the
 “ windows, and they must be left open as there are no other
 “ means of ventilation.”

KETTERING URBAN.—“ The surroundings of all the
 “ provided and non-provided schools are satisfactory. With
 “ the exception of the Market Hill Girls’ they have all good
 “ playgrounds laid with asphalt. A free circulation of air
 “ through the buildings exists at each school, all the provided
 “ schools possess the Central Hall system, as well as the
 “ Church of England Boys’ and St. Mary’s Girls’ and Infants’
 “ of the non-provided.” The Medical Inspection of School
 Children is carried out by the Medical Officer of Health, as
 School Medical Officer under the Kettering Urban District
 Education Committee.

RAUNDS URBAN.—“ The public schools in the District
 “ are kept very clean, the closets and drainage are in as good
 “ sanitary condition as they can be until the new water
 “ supply is laid on and both schools connected ; and no
 “ closure for infectious disease was necessary during the
 “ year.”

BRIXWORTH RURAL.—On account of Scarlet Fever,
 “ the schools were closed at Walgrave for 10 days and at
 “ Holcot for 3 weeks,” and on account of Whooping Cough
 at Moulton, Brixworth, and Thornby, “ for 14 days in each
 “ village.” The Schools of the District “ have been visited

“ by the Inspector and a monthly report made to the Council
 “ on the state of the closets and urinals.”

DAVENTRY RURAL.—“ I had at no time during the year
 “ to advise that any School in the district should be closed
 “ for an outbreak of infectious disease.”

GRETTON RURAL.—“ A most important sanitary gain,
 “ as well as educational, is the completion of the new public
 “ elementary school at Gretton. Structurally it is without
 “ exception the finest public elementary school I have ever
 “ seen in a parish of this population.”

OUNDLE RURAL.—In regard to Nassington and Yarwell,
 “ the schools in these villages had to be closed on account
 “ of Measles.”

OXENDON RURAL.—In connection with the occurrence
 of diphtheria at Marston Trussell, this “ called attention to
 “ the drainage arrangements of the school closets. These
 “ were found to be very defective and were remedied.”

POTTERSPURY RURAL.—“ All the public elementary
 “ schools of the district are in good condition. During the
 “ year it was deemed advisable to recommend the closing
 “ of the following schools, viz., Paulerspury in November,
 “ owing to Diphtheria, Cosgrove and Potterspury in Decem-
 “ ber, owing to Scarlet fever.”

TOWCESTER RURAL.—“ I have paid irregular visits to
 “ schools in the district and have found no insanitary condi-
 “ tions. When infectious disease has occurred among
 “ scholars, due regard has been given to the instructions
 “ in the L.G.B. Memorandum which deprecates the routine
 “ closure of schools, and the alternative exclusion of

“ particular scholars has been carried out as far as possible,
 “ but it was necessary towards the end of the year to close the
 “ Church of England School at Silverstone for about 5 weeks
 “ owing to the prevalence of diphtheria—this was the only
 “ school closure in 1908.”

ISOLATION HOSPITALS AND DISINFECTION.

Some improvements have been made in connection with the Isolation Hospital at Wellingborough, an extension has been made to the one at Daventry, and a new block of observation and discharge wards has been completed in connection with the Kettering Joint Hospitals. Progress has been made also with the plans for the hospital for the Rugby Joint Isolation Board, on which the Crick Rural District Council has its proportional representation, but they have not been submitted yet for the approval of the Local Government Board. It is a satisfaction to know that the contributions from the County Council towards the establishment expenses of the Kettering Joint Hospitals and the Oundle Rural Isolation Hospital have been fairly earned, and that the value of the latter in checking the spread of disease in separate villages has fully justified its erection. In regard to the Oundle Hospital, however, I shall be glad when the wood and iron wards are replaced by permanent structures of brick, and the Oundle Urban District combines with the Rural District for hospital purposes and for obtaining the advantage of more efficient disinfection of bedding and clothing. It is to be noted also that the question of a Public Disinfecting Station in the Kettering Urban District is brought forward again by the Medical Officer of Health, and that a plea for a Steam Disinfector is urged in respect of the Desborough Urban District. In my opinion, no District should be without effective means for disinfecting clothing and bedding which

have been exposed to infection, and I hope that the consideration of this matter will lead to more practical results in the near future than have been achieved in the past. Certainly such provision should be made in every Urban District of the County, and it is noteworthy that no expression of regret for their action is forthcoming from such of the Rural Districts as have already acquired portable disinfectors.

The following references from the Reports of the District Medical Officers of Health have bearing on the foregoing points, and may be helpful to some District Councils in the consideration of questions of isolation and disinfection:—

DESBOROUGH URBAN:—"The only Isolation Hospital in the district is that for Small-pox, happily it has not been found necessary to utilise it during the year. At the termination of every case of Enteric Fever, Scarlet Fever and other infectious diseases, the sick-rooms have been disinfected under the supervision of your Inspector, but as already referred to the clothes and bedding, owing to the absence of a suitable Steam Disinfector, have not received that treatment your officers would desire."

KETTERING URBAN AND RURAL:—"This Hospital has been in full use throughout the year." In his report Dr. Lee, the Medical Officer to the Joint Hospital Board, says: "I should like to congratulate the Board on the policy which has resulted in the erection of the New Block, which contains an excellent bath-room, spacious discharge and observation Wards, and which cannot fail to be useful, and also on the linking up of the Institution with the water and sewerage systems of the town." The Medical Officer of Health says in regard to Disinfection apart from the Isolation Hospital, "The one weak link in our armour for disinfection is, we have been unable to disinfect bedding and clothing."

“ So that the provision of a Public Disinfection Station will
 “ have to be considered. I would again respectfully urge
 “ your authority to consider this question. With the
 “ present means at the disposal of your officers it is impossible
 “ to disinfect thoroughly bedding, mattresses, and other
 “ heavy articles. In view of the Public Health (Tubercu-
 “ losis) Regulations sent out by the Local Government
 “ Board, it is almost imperative that your officers should
 “ have such a station at their disposal in order to utilise
 “ their powers for the purpose of preventing the spread of
 “ infection from Pulmonary Tuberculosis. Again in the
 “ case of Midwives who have attended infectious cases, their
 “ clothing, etc., is supposed to be disinfected by the local
 “ Sanitary Authority.”

OUNDLE URBAN.—“ I must refer to the need for better
 “ isolation and disinfection. I trust some arrangement will
 “ shortly be arrived at which will enable us to use the Isolation
 “ Hospital and disinfecting plant which is in our district.”

ROTHWELL URBAN.—“ There is no Isolation Hospital.”

WELLINGBOROUGH URBAN.—“ The Isolation Hospital
 “ for zymotic diseases is in good order, and 25 cases have
 “ been satisfactorily treated this year. There were no
 “ deaths. A new bath-room has been provided. The spare
 “ rooms in the house for nurses will be used for extra cases
 “ and convalescents. The hospital is situated in an elevated
 “ position about half-a-mile out of the town. A new am-
 “ bulance van for the removal of infectious cases has been
 “ provided.”

DAVENTRY RURAL.—“ During the year much more use
 “ has been made of the Infectious Hospital than formerly,
 “ and I think great benefit to the health of the District has

“ resulted. The outbreak of Scarlet Fever in Floore during
 “ the autumn would have been much more serious had the
 “ patients been left at home, and moving the first cases from
 “ Staverton and Stowe-nine-Churches seemed to quite stop
 “ the outbreak in those villages ; altogether, fourteen cases
 “ were moved to Hospital during the year, one diphtheria,
 “ and thirteen scarlet fever. The diphtheria case came from
 “ Farthingstone, the child was very seriously ill from the
 “ first and the case ended fatally ; of the scarlet fever
 “ cases, nine came from Floore, two from Staverton and,
 “ one from both Stowe-nine-Churches and West Haddon.
 “ All these cases recovered, though one or two of them were
 “ very ill. I shall be glad to see the new wing of the In-
 “ fectious Hospital finished and furnished. Last October
 “ the old wards were quite full of patients, and had another
 “ case occurred in the district it would not have been ad-
 “ mitted for want of room ; if only the new building were
 “ completed many more cases could be admitted should need
 “ arise. I would strongly urge that your Council endeavour
 “ to at once get the Daventry Town Council to complete the
 “ building, and to furnish the new ward ; it is no use waiting
 “ till we have an outbreak of some infectious disease and the
 “ hospital full.”

OUNDLE RURAL.—“ The Isolation Hospital is
 “ kept up in a satisfactory condition. Owing to the absence
 “ of infectious disease it was not much used during the year.
 “ Of course, the whole idea of isolation hospitals is based
 “ upon the theory of taking the first case away from its
 “ surroundings, and so leading to a decrease in the number
 “ of cases. It ought to lead to diminution, but *we cannot*
 “ *argue from one good year.* An example of the use of the
 “ Hospital is found in a diphtheria case removed from
 “ Kingscliffe in December. In 1907 there were cases of
 “ diphtheria at this village, but the parents of the children

“ attacked refused to allow them to come into the hospital ;
 “ as a result there were ten cases and one death, and also
 “ considerable inconvenience caused to the school. In 1908
 “ the case which occurred was immediately removed, largely
 “ owing to the prompt action of Dr. Dowding, the local
 “ medical man. The disease was of a mild type, but proved
 “ by bacteriological examination to be diphtheria. There
 “ have been no more cases.”

TOWCESTER RURAL.—“ There is no isolation hospital,
 “ but tents are ready for erection in case of need. For
 “ disinfecting purposes the Authority have a Thresh’s Emer-
 “ gency Disinfector, in which the vapor of Formic Aldehyde
 “ is employed.”

VACCINATION.

By a Vaccination Order of 1898, the Local Government Board made, in pursuance of the Vaccination Act, 1867—1898, certain rules and regulations with respect to Public Vaccination, and prescribed the “ Form of Notice ” to be given by the Registrar of Births to the person to whom notice is required to be given under Section 15 of the Vaccination Act, 1867. Inasmuch, however, as the section of the Vaccination Act of 1898, relating to the exemption of persons from liability to penalties under certain sections of the Act of 1867, has been repealed by Section 2 of the Vaccination Act, 1907, as from the 1st day of January, 1908, an amending Vaccination Order was issued by the Local Government Board under date 21st September, 1907. By this it is pointed out that exemption from the penalties referred to can be obtained, within four months from the birth of the child, by a statutory declaration of conscientious belief that vaccination would be prejudicial to the health of the child, and by the delivery of the declaration thereafter to the Vaccination Officer within

ANALYSIS OF VACCINATION OFFICERS' RETURNS, 1893-1907.

UNIONS OF THE COUNTY OF NORTHAMPTON.			PERCENTAGES OF BIRTHS IN RESPECTIVE YEARS.																											
			Certificates of " Successful Vaccination." (Col. 1.)							Certificates of " Conscientious Objection." (Col. 2.)							Not finally accounted for. (Col. 3.)							Total Living Unvaccinated.						
																								(Col. 2† Col. 3.)						
			* 1893-97	1898- 1902	1903	1904	1905	1906	1907	1893-97	1898- 1902	1903	1904	1905	1906	1907	1893-97	1898- 1902	1903	1904	1905	1906	1907	1893-97	1898- 1902	1903	1904	1905	1906	1907
BRACKLEY	39.1	51.3	66.2	68.2	80.4	66.6	63.1	10.7	11.8	12.1	11.2	16.2	16.8	47.7	30.8	16.4	10.8	0.4	10.6	8.1	49.3	41.6	28.2	22.9	11.6	26.8	24.9	BRACKLEY		
BRINWORTH 	42.9	50.6	66.7	59.7	49.4	57.5	59.8	14.4	18.3	20.3	19.6	21.2	25.4	44.2	28.0	8.4	12.0	24.1	12.9	7.5	49.2	42.5	26.7	32.3	43.7	34.1	32.9	BRINWORTH		
DAVENTRY 	51.1	56.9	68.1	64.8	64.1	66.2	58.6	15.0	12.9	14.8	21.9	18.2	24.2	36.3	19.8	13.2	12.6	8.1	9.6	9.2	39.4	34.8	26.1	27.4	30.0	27.8	33.4	DAVENTRY		
HARDINGSTONE	38.5	48.9	55.6	49.1	51.7	42.1	37.7	34.4	32.8	40.0	37.8	47.1	47.4	42.7	8.2	4.2	1.6	4.6	4.2	7.1	51.1	42.7	37.0	41.6	42.4	51.3	54.5	HARDINGSTONE		
KETTERING 	1.6	17.3	31.8	31.8	27.7	25.2	26.2	21.4	42.3	47.3	55.5	58.9	55.9	84.2	47.7	16.5	8.9	7.0	7.5	11.1	84.2	69.2	58.8	56.2	62.5	66.4	67.0	KETTERING		
NORTHAMPTON	3.7	16.6	27.0	24.7	25.9	26.0	20.5	31.4	49.5	52.9	56.8	59.0	63.9	74.2	39.8	13.3	12.5	9.0	8.1	7.7	83.3	71.2	62.8	65.4	65.8	67.1	71.6	NORTHAMPTON		
OUNDLE 	82.8	85.1	80.0	86.0	81.2	79.4	80.7	3.3	5.0	1.4	5.0	7.1	7.6	9.0	4.8	6.7	6.9	7.3	6.6	5.1	9.2	8.1	11.7	8.3	12.3	13.7	12.7	OUNDLE		
† PETERBOROUGH ...	84.0	76.3	77.5	78.5	78.8	78.6	75.0	2.1	3.6	3.4	3.7	3.3	8.2	7.6	11.1	10.5	9.2	9.8	11.0	10.5	7.6	13.2	14.1	12.6	13.5	14.3	18.7	PETERBOROUGH		
POTTERS PURY 	58.9	57.5	67.5	64.8	61.6	55.5	52.6	27.4	24.1	25.6	27.4	34.9	36.9	29.2	6.1	3.4	3.7	3.0	2.6	4.4	33.0	33.5	27.5	29.3	30.4	37.5	41.3	POTTERS PURY		
THRAPSTON 	10.9	38.7	45.8	51.6	49.6	45.9	43.1	43.8	43.5	34.5	37.9	44.2	44.5	72.0	9.9	3.3	5.2	4.3	5.3	6.5	79.7	53.7	46.8	39.7	42.2	49.5	51.0	THRAPSTON		
TOWCESTER 	38.9	47.9	51.5	49.5	55.4	46.6	45.4	27.4	25.1	29.8	26.2	35.2	31.7	43.9	16.2	11.6	10.9	9.5	13.4	17.5	50.7	43.6	36.7	40.7	35.7	48.6	49.2	TOWCESTER		
WELLINGBOROUGH ...	1.1	16.2	39.7	38.6	47.5	46.7	30.4	22.4	42.4	46.1	39.0	40.6	59.7	82.2	50.8	9.1	6.6	4.7	4.2	3.8	86.4	73.2	51.5	52.7	43.7	44.8	63.5	WELLINGBOROUGH		
MEANS 	25.7	35.4	47.7	46.5	48.2	46.6	41.6	21.6	32.4	35.0	36.0	38.4	43.3	58.4	32.2	11.2	9.1	7.6	7.7	8.1	62.8	53.9	43.6	44.1	43.6	46.2	51.4			

* In the Returns for the years 1893—97 the number of Certificates of Conscientious Objection received in respect of the children born in 1897 has not been included in the Percentages " Not finally accounted for," but allowance has been made for these in the " Total Living Unvaccinated."

† The Soke of Peterborough is a County in itself, and I am therefore much indebted to the courtesy of the Clerk of the Peterborough Union for furnishing me with information for the purposes of this table.

N.B.—The Rural Districts of Crick, Oxendon, Gretton, Easton-on-the-Hill, and Middleton Cheney are included in Unions in the Counties of Warwick, Leicester, Rutland, and Oxford, and do not therefore enter into the above Analysis; on the other hand the Unions of Oundle and Thrapston each include a few parishes in Huntingdonshire.

seven days. The declaration may be made before a Commissioner for Oaths, a Justice of the Peace, or any other officer authorised to receive a statutory declaration. The facilities thus given by the Vaccination Act of 1907 to conscientious objectors appear to have been appreciated to a very considerable extent in some of the districts of this County, and I anticipate from the remarks of the Medical Officers of Health for such urban districts as Kettering and Irthlingborough that the number of living unvaccinated persons will be largely increased in the near future.

From the Analysis of Vaccination Officers' Returns 1893-1907 inserted in this report, it will be gathered that the protection afforded to the community by efficient vaccination has been lessening in quantity during the past few years, as compared with the quinquennial period 1898-1902. I have so often expressed my personal opinion on the dangers attaching to an indifferently vaccinated community that I need not say more now than that I regard the advent of small-pox as the best inducement for individuals to acquire the benefits of vaccination, and that I think an early importation of small-pox cases into the County would not prove to be an unmixed blessing. With the genuine conscientious objector to vaccination it is easy to have sympathy, but the interests of a community appear to justify periodic stimulation in a practical manner. The following extracts from the Reports are worthy of attention in regard to this matter :—

IRTHLINGBOROUGH URBAN.—“ Vaccination, since the
 “ new regulations came into force, is becoming more and more
 “ a dead letter. Exemption certificates are now so easily
 “ obtained that parents are beginning to consider a visit
 “ to the nearest local magistrate as quite as necessary and
 “ important as a visit to the registrar.”

KETTERING URBAN.—“ Number of Births registered in
 “ 1908 in Kettering, 683 ; number of Vaccination Certificates
 “ received, 1114 ; number of Exemption certificates granted,
 “ 576. I am indebted to the Vaccination Officer for these
 “ returns. Some of these exemptions were those whose
 “ children were born prior to 31st December, 1907, but the
 “ parents applied for the exemptions in January, 1908, after
 “ the Act and Order came into actual force on 1st January,
 “ 1908, when the parents were not forced to go to the
 “ Police Station for it, but could obtain it privately from
 “ a magistrate.”

BRIXWORTH RURAL.—“ The number of unvaccinated
 “ children is rapidly increasing, and will be in great danger
 “ should Small Pox break out.”

TOWCESTER RURAL.—“ Vaccination becomes more
 “ farcical year by year. I am indebted to the Vaccination
 “ Officer for the following figures : in the Towcester Sub-
 “ district 49 children were vaccinated and there were 74
 “ ‘conscientious objections.’ In the Abthorpe Sub-district
 “ there were 25 children vaccinated and 69 ‘conscientious
 “ ‘objectors.’ It seems a pity that the effete and costly
 “ machinery of the Vaccination Act is maintained.”

WATER SUPPLY.

The records as to water supply in many of the Districts of the County are more important than for several years past, and will repay perusal. The lessened rainfall has made the test of the water-bearing capacities of certain districts very severe, and it seems certain that supplemental supplies will require to be found for such Urban Districts as Desborough and Irthlingborough as has been achieved successfully for the

Borough of Brackley. The prospects of the Urban District of Raunds appear to be good, and Burton Latimer in the Kettering Rural District now has an ample supply of water. The question of a public supply of water to the town of Thrapston is at last receiving some attention, but, if the consideration of it proves abortive, it may become necessary for the County Council to make a representation in the matter to the Local Government Board under Section 19 (2) of the Local Government (England and Wales) Act, 1888.

BRACKLEY BOROUGH.—“ During the year the new well
 “ has been completed, the surface works including pump
 “ and engine have been fitted and pumping has been com-
 “ menced. Owing to the low level of the water in the old
 “ well, it was found necessary to begin pumping from the
 “ new well sooner than was anticipated.”

HIGHAM FERRERS BOROUGH.—“ The public water supply
 “ continues, in all respects, to give complete satisfaction.
 “ Its use has now become practically universal throughout
 “ the town both for drinking and flushing purposes.”

DESBOROUGH URBAN.—“ Although it has not been
 “ necessary to interfere with the supply of water to the
 “ inhabitants at any time during the year, the well at the
 “ water-works furnishes some ground for anxiety in view
 “ of the fact that its depth at the end of 1907 was 16 feet
 “ whereas at the corresponding period of 1908 it was eight
 “ feet, seven inches. Of course this reduction of the water
 “ supply is in a great measure accounted for by the reduced
 “ rainfall, there having been 6.57 inches less than in the
 “ previous year. There should be no blinking at the fact
 “ that the steps will have to be taken in the near future to
 “ ensure a reliable supply of that which is of primary sanitary

“ importance, and which no public body can afford to dis-
 “ guise. The total quantity of water supplied to the town
 “ has been on an average of 29,000 gallons per day, and
 “ equivalent to 7 gallons per head, of the estimated popula-
 “ tion of 4,120. This consumption appears to be small,
 “ but it must be remembered that the town water supply
 “ is supplemented in a great majority of dwelling-houses
 “ by a rain-water cistern, and this water is largely used for
 “ washing clothes, etc. The main in Pioneer Avenue has
 “ been extended so as to permit of some houses in that locality
 “ being supplied with the town water. With reference to the
 “ surroundings of the water-works well certain recom-
 “ mendations were made in my Report of last year, the
 “ majority and most pressing of these, I am pleased to state,
 “ have been carried out by the Council. The land in the
 “ immediate vicinity of the well has been turfed over and
 “ presents not only a sanitary but also an æsthetic improve-
 “ ment. The drain from the urinal which was found to be
 “ leaking has been taken up and a temporary arrangement
 “ of pans and troughs provided. The sewer in the Braybrook
 “ road and near to the Waterworks having been found
 “ defective was taken up and replaced by an entirely new
 “ one with a suitable inspection chamber. In view of the
 “ dangerous proximity of this sewer to the waterworks well,
 “ it has been kept under the vigilant eye of your Surveyor
 “ and frequently tested by him with satisfactory results.
 “ Samples of water from the waterworks well have on four
 “ different occasions during the past year (the last in October)
 “ been sent to the Clinical Research Association for Bac-
 “ teriological Examination, and found to be entirely satis-
 “ factory.”

FINEDON URBAN.—“ The water supply has been ample
 “ in quantity and good in quality during the year. Samples
 “ of the water from the well, and also from the mains, were

“ submitted to Mr. Elborne for analysis, and he reported as
 “ follows :—‘ The analysis indicates a water of first-class
 “ ‘ organic purity, very soft, thoroughly wholesome, and
 “ ‘ suitable for drinking purposes and for a public supply.
 “ ‘ It is less alkaline and rather less saline than when I
 “ ‘ analysed it in the year 1901. A parallel analysis of the
 “ ‘ water taken direct from the well showed that the water
 “ ‘ suffered no alteration whatever by its passage through
 “ ‘ the iron mains.’ It should be a source of great satisfac-
 “ tion to the ratepayers to know that they possess such
 “ a splendid supply.”

IRTHLINGBOROUGH URBAN.—“ A year ago I stated in my
 “ Report that a long spell of drought would probably prove
 “ disastrous. To-day the reservoir is empty, and a con-
 “ siderable part of the town is being daily supplied with
 “ water by means of a water-cart. Such, briefly, is the present
 “ condition of the Water Supply of this important town
 “ with a population of 4,670. In my Report of last year I
 “ stated that the Council had decided to sink a well (near
 “ No. 2) through the lias clay to the marl stone, but that the
 “ projected scheme was subject to the approval of the Local
 “ Government Board. It was not till the end of July that
 “ an enquiry was held, and the result was, that the Local
 “ Government Board refused to sanction the loan until a geolo-
 “ gist’s opinion on the scheme had been obtained and pre-
 “ sented to the Board. Strangely enough, it was resolved to
 “ ignore for the time being the requirements of the Local
 “ Government Board, and trust rather to the encyclopædic
 “ knowledge and opinions of certain members of the Council.
 “ It was then decided, I understand against the advice of
 “ your late Surveyor, to drive a heading from the bottom
 “ of No. 2 well. This was done but the results fell far short
 “ of expectations, at any rate for the present. It must be
 “ admitted that the rainfall for the last six months of the year

“ was unusually low, otherwise the results of this work
 “ might have been much better. Latterly the daily con-
 “ sumption of water far exceeded the amount daily pumped
 “ from the two wells, so that by the end of the year the
 “ reservoir was empty, and the opportunity given and taken
 “ of thoroughly cleansing it. The water is now being pumped
 “ direct into the mains, but only the lower parts of the town
 “ get a supply, and as I have already stated, a water cart
 “ has had to be requisitioned to supply the other parts.
 “ The result has been that many of the wells condemned
 “ and closed during the last few years have had to be opened,
 “ and the top well trough is the source of supply for the water
 “ cart. This trough water was the undoubted cause of an
 “ outbreak of Typhoid Fever a few years ago, and it is still
 “ liable to external and underground pollution. The con-
 “ tinued use of water from these condemned wells is, of
 “ course, a danger to the public health. To me it is wondrous
 “ strange, yet true, that several prominent Councillors are
 “ unbelievers in the possibility of these surface wells being
 “ liable to contamination, and equally so to the dangers of
 “ drinking this polluted water.”

KETTERING URBAN.—“ There has been an ample supply
 “ of good water for all purposes during the year, and with the
 “ exception of Sunday afternoons, when pumping at Cransley
 “ ceases about noon until 6 a.m. on Monday morning, the
 “ pressure has been given continuously from the high level
 “ tank at Clover Hill. The reports of the County Analyst
 “ made quarterly on the quality of the water have been in all
 “ cases quite satisfactory. In addition it may be said that the
 “ water has always proved to be of very good quality and no
 “ cases of plumbism have ever occurred in the town. Con-
 “ siderable progress has been made at the New Reservoir Works
 “ near Thorpe Malsor during the year and it is hoped that in
 “ twelve months time this reservoir will be available for an

“ additional supply, should this be required. The electrical
 “ pumps put down at Clover Hill in 1906 have proved very
 “ convenient and very reliable in their working. The only
 “ work of any importance in connection with the water
 “ supply has been the removal and special cleaning of a con-
 “ siderable quantity of sand from the surface of the Filter
 “ Beds and the addition of a quantity of new sand in order
 “ to restore the Beds to their full working depth of 2ft. A
 “ few wells used for domestic supplies have been closed
 “ during the year and the town water laid on.”

OUNDLE URBAN.—“ This remains excellent, both in
 “ quantity and quality.”

RAUNDS URBAN.—“ The water scheme is proceeding
 “ satisfactorily and should be completed in about three
 “ months if the weather continues favourable. The reser-
 “ voir is now ready for covering in, the mains are nearly
 “ all laid, and the engine house and gas house are nearly
 “ completed and ready for receiving the engines, pumps
 “ and plant. The well is also completed. There are over
 “ 500 water closets within the district. The greater part of
 “ these are flushed by hand, and the whole of these would be
 “ connected as early as possible when the water scheme is
 “ completed.”

ROTHWELL URBAN.—“ The greater part of the town
 “ is supplied with water from the town supply. Many groups
 “ of the older houses get their supply from a pump usually
 “ situated in the yard or square formed by the houses. In
 “ one part of the town 20 houses are supplied by one pump.
 “ The supply available at the Works during November
 “ averages 10 gallons per day per head of population. In
 “ March the supply was 47 gallons, and in December, 1907,
 “ 91 gallons per day per head of population. This marked

“ decrease in quantity of water supply is due to the diminished
 “ rainfall and is therefore only temporary. The total rainfall
 “ from 1st January to 30th November, 1907, was 24.63
 “ inches, and from 1st January to 30th November, 1908,
 “ was 17.62 inches.”

RUSHDEN URBAN.—“ I have analysed four samples of
 “ well-water during the year. Two were found totally unfit
 “ for drinking purposes. With the plentiful supply of
 “ excellent water available, all the remaining private supplies
 “ from wells should be abolished.”

WELLINGBOROUGH URBAN.—“ There is a plentiful supply
 “ of good sound water, and it is hoped that the new system
 “ of softening, etc., will be satisfactory. In the town where
 “ the water in the wells has been found polluted, the wells
 “ have been closed and the town water laid on.”

BRACKLEY RURAL.—“ The water supply is derived from
 “ shallow wells and was deficient in some villages after the
 “ drought. The quality was good as hitherto, as is proved
 “ by the continued absence of water-borne disease.”

BRIXWORTH RURAL.—“ There is a good supply of water
 “ which is laid on to stand-pipes in the streets or into the
 “ houses at the following villages:—Chapel and Church
 “ Brampton, Great and Little Brington, Harleston, East
 “ Haddon, and part of Creaton. Hollowell is well supplied
 “ through iron pipes, as also Hazelbeach and part of Holdenby
 “ The other part of the district is supplied by wells or springs.”

HARDINGSTONE RURAL.—“ The water supply in the
 “ various villages in which schemes have been installed has
 “ been working satisfactorily, and there has been no com-
 “ plaint in these of any shortness of water.”

KETTERING RURAL.—“ Burton Latimer now has a
 “ magnificent water supply ; 30,000 gallons are used every
 “ 14 days for flushing.” At Stanion, “ the new water supply
 “ is in working order.” . . . “ Broughton—A special report
 “ for the Local Government Board is being prepared as to the
 “ water supply of this village.” A new scheme for water
 supply to the village of Corby is being prepared.

NORTHAMPTON RURAL.—“ The water supply at Kisling-
 “ bury and Lower Heyford is good and adequate, only a few
 “ minor repairs have had to be carried out, though frost has
 “ occasionally been rather troublesome. The town water
 “ supply is supplied to Duston, and gradually more of the
 “ houses are being connected with the mains ; the flushing
 “ tank erected at the top end of the village is also working
 “ well. On account of the impure state of the wells at three
 “ houses at Weston Favell and also in two yards, arrange-
 “ ments have been made with the Northampton Authorities,
 “ and they have carried their mains round the village. The
 “ three houses named have already been connected and the
 “ two yards will be so immediately.”

OUNCLE RURAL.—A proposed water supply for the parish
 of Kingscliffe is under consideration. The scheme consists
 of :—

“ A small pumping station in the Old Warren near Spout
 “ Hall, with a concrete well to receive through a short exten-
 “ sion of the railway culvert, a portion of the water which
 “ flows from a copious and perpetual spring under the
 “ railway.

“ Oil engine, pumps, etc.

“ Rising and distributing mains.

“ Combined storage and service reservoir, capacity about
 “ 50,000 gallons, i.e., 3 days’ supply, so as to provide against
 “ a break-down or in case of a large fire.

“ Stand pipes, fire hydrants, valves, etc.

“ And provides for purchase of land for sites, fencing,
 “ easements, engineering and maintenance for six months, etc.

“ I beg to say that the scheme presents no intricate nor
 “ costly engineering difficulties, and that the proposed
 “ source provides a plentiful supply of water, the quality of
 “ which, according to a report of the Public Analyst, is
 “ satisfactory, shewing ‘ absence of organic matter, unpollu-
 “ tion, and fitness for drinking purposes,’ Consequently
 “ filtering beds are not required. The static head obtainable
 “ throughout the present inhabited portion of the parish
 “ would range between 120ft. and 75ft. and would allow of
 “ considerable extension at any future time, and would give
 “ a high pressure in case of fire, and be capable of supplying
 “ water to the top storey of any domestic building in the
 “ parish, as required by the Public Health Act. The esti-
 “ mated cost of the works is £1,280, which, including pur-
 “ chase of land and annual cost of upkeep, would (assuming
 “ that a thirty years’ loan be granted), require a sum of
 “ £102 6s. for annual repayment of principal and interest.”

OXENDON RURAL.—“ The water supply of the district
 “ is very good throughout. The supply is mainly through
 “ pumps and wells. Samples have been analysed from time
 “ to time and no permanent defect has been found.”

POTTERS PURY RURAL.—“ The report for 1907 still holds
 “ good, viz. : ‘ The new public water supply for Hartwell
 “ ‘ has proved very satisfactory. Wicken and Denshanger

“ ‘ have public supplies of good quality. The rest of the
 “ ‘ district is dependent on shallow wells, more or less exposed
 “ ‘ to contamination. In this respect the conditions of
 “ ‘ Potterspury and Paulerspury remain the same as in former
 “ ‘ years, owing to the opposition of small owners and rate-
 “ ‘ payers.’ ”

THRAPSTON RURAL.—In respect of Thrapston, “ the
 “ question of a public water-supply was again considered,
 “ and I pointed out that within the last few years most of the
 “ closets in the town had been connected with the sewers,
 “ but that there was no water to flush them excepting what
 “ could be brought by hand.” . . . At Brigstock
 “ there is a good public water supply, but all the houses do
 “ not connect.”

TOWCESTER RURAL.—“ There is a public supply of
 “ water at Towcester, Greens Norton, Abthorpe, Blakesley,
 “ Gayton, and Maidford. In the other villages the people
 “ are dependent on wells, and I have heard no complaint
 “ of scarcity except occasionally in dry weather, and the
 “ supply generally is wholesome and free from pollution.
 “ There were many complaints regarding the water supply
 “ at Towcester towards the close of the year—a deficient
 “ supply being complained of in the higher-lying parts of the
 “ town, and in the town generally, of frequent turning off,
 “ resulting in an intermittent supply, with great turbidity
 “ when it was again turned on. This appears to have been
 “ due not to a scarcity of water, but to defects in the pumping
 “ machinery, and the supply is now satisfactory.”

WELLINGBOROUGH RURAL.—“ In April last there was a
 “ Government inquiry at Isham respecting the water supply.
 “ The loan has been sanctioned and the work will shortly

“ commence. Arrangements are being made for the Irchester
 “ and Wollaston parishes to obtain a constant supply of water
 “ from the Rushden and Higham Ferrers Water Board.
 “ Several samples of water from wells have been examined.
 “ Those which proved unfit for use have been closed.”

DWELLING-HOUSES AND OVERCROWDING.

The Housing, Town Planning, etc., Bill, which I referred to in my last Annual Report as having been introduced by the President of the Local Government Board, did not become law during the year 1908 ; but it has been re-introduced and is now under consideration. When passed, it is to be hoped that it will prove to be a real help to all who are desirous of securing reasonable housing improvements in rural districts, and that the administration of its provisions will not necessitate either unwieldy proceedings or ignore the advantage of local approval by the County Council. The process of replacing old cottages of inferior type by new dwellings cannot be a rapid one ; but I am glad to know that the movement in this direction is becoming more noticeable in several of the rural districts of the County, and that the need for care in construction is not lost sight of. The long standing difficulty as to working-class cottage accommodation in the Borough of Brackley is now being inquired into, among other sanitary conditions of that district, by an Inspector of the Local Government Board, and will be reported on doubtless in due course. The anticipated Housing Act should prove helpful to the Borough Council of Brackley.

BRACKLEY BOROUGH.—“ I must again call your atten-
 “ tion to the condition of certain houses in the town, which
 “ are not only unfit for human habitation but are a disgrace
 “ to the district.”

HIGHAM FERRERS BOROUGH.—“ House accommodation
 “ in the town is good, but constant vigilance on the part
 “ of the Sanitary Officer is needed to prevent overcrowding,
 “ and several cases have required attention during the past
 “ year.”

DESBOROUGH URBAN.—“ There have been 18 dwelling-
 “ houses erected during the year, for the most part located
 “ on the new estate belonging to the Co-operative Society.
 “ These houses mainly designed for the working classes,
 “ afford excellent accommodation, are conveniently arranged
 “ and have abundance of open-air space about them ; but
 “ notwithstanding all this additional house accommodation
 “ in the district it is regrettable to have to record that four
 “ cases of over crowding required the intervention of your
 “ Inspector.”

FINEDON URBAN.—“ Two cases of overcrowding have
 “ been inquired into and remedied.”

IRTHLINGBOROUGH URBAN.—The Sanitary Inspector
 reports thus :—“ No dwelling houses have been erected
 “ during the year. Several have been put in repair and
 “ cleaned throughout. Three cases of overcrowding and
 “ three filthy dwellings have been dealt with. One dilapi-
 “ dated dwelling has been put in repair and three closed.”

KETTERING URBAN.—“ Eleven houses were found unfit
 “ for habitation ; 6 of these have been closed by the owners,
 “ and 5 have been made fit for habitation.”

OUNDE URBAN.—“ Three cases were reported, in two
 “ of which the nuisance certainly existed. The other was not
 “ proved. . . . At your request I made a complete,
 “ or practically complete, inspection of every cottage in the

“ town. . . . Permission to inspect the premises was
 “ granted by nearly every tenant, and only two or three cot-
 “ tages were not inspected owing to the refusal of the occupiers
 “ to allow us to enter. The cottages have been built at
 “ various periods and without any idea of a common plan.
 “ They date from the 17th century to the present day.
 “ Absence of building bye-laws, and also of modern hygienic
 “ ideas have resulted in many of them being wanting as
 “ regards light and ventilation ; but on the other hand,
 “ in most cases, they are, structurally, excellently built,
 “ the roofs, walls, and chimneys being almost invariably in
 “ good order. The position and size of the windows is faulty
 “ in many instances, but as a rule the condition of the
 “ cottage depends upon the tenant, as regards cleanliness
 “ and general sanitation, and it is a pleasure to be able to state
 “ that the majority of the cottages are very well kept.
 “ Overcrowding does not exist to any appreciable extent,
 “ but there is a very general expression for a want of more
 “ room and more cottages. There are many yards in the
 “ town, the houses being built round on two, three, or four
 “ sides, town water is laid on, and as a rule the closets are
 “ connected with the town sewer. All the closets connected
 “ with the town sewer are handflushed, with the exception of
 “ Inkerman Yard, where there is an excellent self-flushing
 “ system installed. I am told that these closets are not
 “ infrequently blocked with old rags, tins, etc. The other
 “ closets are, however, not sufficiently flushed, and a circular
 “ notice has been sent out advising better and more regular
 “ flushing. Kitchen refuse is not well disposed of, being left
 “ in old pails or boxes—sometimes thrown in the yard.
 “ Much of it could be burnt in the kitchen fires. Refuse is
 “ collected and carried away on Tuesdays and Fridays.
 “ The surface of the yards is very fair, cobbles being placed
 “ round the cottages and the yard macadamized as a rule.
 “ Vault closets exist in the Benefield Road, a few in East

“ Road, and at Tilley Hill ; otherwise all closets are connected with the main sewer. Well water is mostly used in the Benefield Road, Havelock Cottages, three cottages in St. Osyth’s Lane, and at Tilley Hill ; in all other cases town water is laid on. Several cottages, unfit for habitation, have been pulled down and new cottages are being built to replace them, the number of new cottages being in excess of those pulled down.”

RAUNDS URBAN.—“ With the exception of some of the very oldest houses, the house accommodation of the working classes is very good both in themselves and their surroundings.”

RUSHDEN URBAN.—“ Attention will have to be paid to the condition of the old houses running off the High Street to Rectory Road and also in Duck Street. . . . Four houses in Albion Place, which were unfit for human habitation, have now been put into a state of repair. Two houses in Duck Street have been closed as unfit for human habitation.”

WELLINGBOROUGH URBAN.—“ Nine dirty and dilapidated houses have been cleaned and repaired, and about 30 houses thoroughly cleaned.”

BRACKLEY RURAL.—“ Two cases of overcrowding were dealt with. . . . Five sets of plans were submitted and approved during the year, including one for 7 new cottages at Thorpe Mandeville to replace 5 old ones.”

BRIXWORTH RURAL.—“ Six new houses have been erected : four reconstructed : three houses closed as not fit for human habitation. Four cases of overcrowding have been reported and abated.”

DAVENTRY RURAL.—“Several cases of overcrowding came under notice, but these were all abated without much trouble.”

HARDINGSTONE RURAL.—“One new cottage has been built at Piddington; one at present unoccupied at Hackleton; and two also not yet occupied at Little Houghton. A complaint was received during the year about the bad state of some cottages at Hackleton, but on close investigation there seemed no cause for the complaint, as with the exception of a few trivial defects which were easily remedied, they compared well with other cottages in the district.”

MIDDLETON CHENEY RURAL.—“The number of inhabited houses has decreased on account of many having become unfit for habitation and being left in this condition by the owners. Moreover, at the present moment there does not appear to be any possibility of these uninhabited cottages being made fit again for occupation as there does not appear to be any demand for them from desirable tenants. Although three new houses have been erected in the district during the past year, there have only been eight erected during the past six years, and this number in no way compensates for those that have fallen into disuse from various causes. Generally speaking the houses of the working class are distinctly bad, and this remark, as in my last Annual Report, more particularly applies to the village of Middleton Cheney, where there are many hovel houses barely fit for occupation. None, however, have been declared unfit for habitation, although few steps are taken to repair dilapidations as they occur.”

NORTHAMPTON RURAL.—“Two new houses have been built at Kislingbury and two old ones have been demolished.”

OUNDLE RURAL.—“Improvements continue to be made
 “in the housing of some of our villages, especially Wood-
 “newton, Apethorpe and Wadenhoe. The rebuilding of
 “Ashton is nearing completion and it will be one of the
 “model villages of the County.”

OXENDON RURAL.—“The house accommodation is,
 “on the whole, adequate and cleanly. Four new houses
 “have been built during the year at Marston Trussell in
 “place of some old and insanitary cottages. They have
 “been thoroughly inspected and their sanitary arrangements
 “are in excellent order. One new house has been erected
 “at Stoke Albany, but no others have been built anywhere
 “in the district.”

POTTERSPURY RURAL.—“Four cases of overcrowding were
 “dealt with by the Sanitary Inspector, and abated, namely, two
 “at Yardley Gobion and two at Potterspury. In these cases
 “there is often great difficulty in finding alternative accom-
 “modation. No houses unfit for habitation were reported.”

TOWCESTER RURAL.—“The house accommodation for
 “working-classes is fairly satisfactory, and there is, with a
 “few exceptions, a sufficiency of open space around them.
 “. . . Action was taken under Part II. of the Housing
 “of the Working Classes Act, 1890, in respect of three houses
 “in Towcester, which were unfit for human habitation—
 “the proceedings resulted in a closing order being made
 “by the Magistrates.”

WELLINGBOROUGH RURAL.—According to the Sanitary
 Inspector, “six new houses have been erected during the
 “year, 29 dwellings put in repair, three dilapidated ones
 “abolished, 12 closed, five overcrowding cases and six filthy
 “dwellings dealt with.”

EXCREMENT AND REFUSE DISPOSAL.

The need for public scavenging at Thrapston is again referred to by the Medical Officer of Health, and is now under the consideration of the Rural District Council. My remarks on the subject of water supply in respect of this place apply equally to that of scavenging: but I hope that both subjects will be dealt with by the District Council in a satisfactory manner. I am glad to note, however, that since my last Annual Report a system of public scavenging has been established for the village of Gretton, that a movement in the same direction is proceeding in the Daventry Rural District, and is in considerable operation in the Brixworth Rural District. The subject of public scavenging is so important in its relation to the health conditions of a community, that I hope more progress may be made during the current year towards its general adoption.

HIGHAM FERRERS BOROUGH.—“ The collection of house
“ refuse is regularly carried out, and no accumulation of it
“ is allowed near any house, so that the general cleanliness
“ of the town is maintained. I attach much importance to
“ this branch of sanitary work.”

DESBOROUGH URBAN.—“ The attention of your Surveyor
“ has been frequently called to the dirty condition of the
“ W.C.'s in some localities. The neglect of the users to
“ utilise the flushing apparatus has resulted in the blocking
“ of the drains on several occasions. House refuse is collected
“ twice a week by the public scavengers and deposited in a
“ field in the neighbourhood, where it is partly burnt and
“ afterwards used as manure. This work of public scavenging
“ appears to be carried out satisfactorily. It would, however,
“ be more conducive to sanitation were occupiers required

“ to furnish suitable galvanised iron receptacles in place of
 “ the wooden boxes in present use.”

FINEDON URBAN.—“ I have had no complaints as
 “ to the way the scavenging has been done during the
 “ year.”

IRTHLINGBOROUGH URBAN.—“ A great many connections
 “ have been made during the year, and very few now remain
 “ to be done. The sanitary cart has for some time ceased
 “ to make its nocturnal round. The scavenging has been
 “ systematically and fairly satisfactorily carried out. The
 “ regulation requiring householders to convey refuse re-
 “ ceptacles on to the pavement on certain days has, on my
 “ suggestion, been abolished, and the scavengers have now
 “ to bring the refuse from the back premises. This, in my
 “ opinion, is a much better and more cleanly arrangement.
 “ All the house refuse and ashes collected are now carted to
 “ the farm, where they are burnt in an open fire—a cheap
 “ and efficient refuse destructor. The resulting ash will, I
 “ have no doubt, make a useful manure. The previous
 “ depositing ground for all sorts of refuse, in Addington
 “ Road, is a disgrace to the parish, and something should be
 “ done in removing tin ware and other rubbish, and by level-
 “ ling the ground to make it, to say the least, less of an eye-
 “ sore, on the outskirts of the town. The site of the old
 “ pond has been drained and levelled, and, I hope, will now
 “ be put to a better and less insanitary use, as for some years
 “ it has served the purpose of a central and convenient tip
 “ for road scrapings, garden and other refuse.”

KETTERING URBAN.—“ The Refuse Destructor provided
 “ in 1904 has been working satisfactorily and continuously
 “ ever since ; with the exception of 1907 ; only comparatively
 “ small repairs having been required during this time. There

“ is a steady though small increase in the quantity of refuse
 “ disposed of which now amounts (including Trade Refuse)
 “ to an average of about 100 loads per week.”

RAUNDS URBAN.—“ The disposal of house refuse, etc.,
 “ has been well carried out by your scavengers, and very
 “ little uncleanness can now be seen in any part of the
 “ town.”

ROTHWELL URBAN.—“ House Refuse is collected and
 “ removed once a week by the Council.”

WELLINGBOROUGH URBAN.—“ House refuse is collected
 “ weekly throughout the town, removed by carts to a proper
 “ place outside the district, and destroyed by incineration.
 “ In the hot weather I would like to see two collections in
 “ the week if it could be arranged.”

BRIXWORTH RURAL.—Scavenging is done once a quarter
 in some eighteen of the parishes of the district.

DAVENTRY RURAL.—“ The question of removing house
 “ refuse has been under consideration, and it is proposed to
 “ take some steps in this matter in some of the larger villages,
 “ provided suitable arrangements can be made for the dis-
 “ posal of it.”

GRETTON RURAL.—“ As a system of scavenging has
 “ now been initiated in the parish of Gretton, and a new
 “ sanitary tumbler-cart has been provided, I would direct
 “ attention to the importance of abolishing the remaining
 “ insanitary pits in this parish and providing pans or pails
 “ and sanitary dust-bins in their stead. This has already
 “ been done in eighteen instances.”

MIDDLETON CHENEY RURAL.—House refuse and excrement “are deposited either in the gardens or on the land.”

OXENDON RURAL.—“Most of the houses in the district “are provided with bucket-closets or vaults. The number “of W.C.’s has increased somewhat in the last few years, “which is responsible for some of the improvements which “it has been necessary to make in the sewage systems. The “disposal of house refuse, etc., is attended to by the house “occupiers, and on the whole is satisfactory.”

POTTERS PURY RURAL.—“The district being an agricultural one, house refuse, etc., is generally disposed of in “gardens or on the land, but pail closets are increasing in “certain localities, and are emptied by the public scavenger. “For the same reason no extensive or elaborate system of “drainage is required.”

THRAPSTON RURAL.—In respect of Thrapston, “I “again drew your Council’s attention to the need for public “scavenging, pointing out that it would merely be a transfer “of expense. It is a choice between putting the expense “on the rates and having the work well done, or each person “paying for themselves with very indifferent results.”

TOWCESTER RURAL.—“Several instances of deficient “sanitary accommodation have been dealt with during the “year, and the necessary proceedings taken for rectification. “. . . . House refuse is removed by public scavenger once “a week in Towcester, and in other parts of the district it is “removed and disposed of by occupiers.”

SEWERAGE AND SEWAGE DISPOSAL.

Considerable progress has been made, as already noted, towards the re-construction of the sewage disposal works in the Kettering Urban District, and for the construction of new works in several parishes to prevent the pollution of streams by sewage. At the same time, works of improvement to systems of sewers have likewise been carried out, and more septic tanks are in use than formerly. Previous complaints of smells from sewers appear in several instances to have been overcome successfully by the increased facilities provided for their ventilation, and the flushing of sewers has received more regular attention. The latter procedure has not been rendered easy by the shortage of rainfall during the year, with the consequent shortage in the local yields of water ; but it is evident that efforts have been made to keep the sewers generally in good working order, and the small amount of endemic sickness from enteric fever is some evidence of successful work in this direction. The following extracts from the Reports are indicative of considerable advance on what could be shown in the matter of sewage disposal in the county less than ten years ago.

HIGHAM FERRERS BOROUGH.—“ The sewage disposal
 “ works continue to give satisfactory results, but it must be
 “ remembered that, although the main sewer of the town
 “ does not admit any storm water, its tributaries from
 “ Kimbolton Road and two streets on the Wellingborough
 “ Road remain a part of the old system which included
 “ surface drainage, and that being so I consider it most
 “ desirable that these should be re-constructed, especially as
 “ now all the houses in the town are connected with the
 “ sewer and provided with proper flushing arrangements.
 “ But this work is not a matter of urgency, and I would

“ suggest that small sections of it should be carried out every
 “ year so that the whole might be completed without imposing
 “ any additional burden upon the rates.”

DESBOROUGH URBAN.—“ The sewers of the district have
 “ been periodically examined by the Surveyor, who reports
 “ that they appear to be in good condition. Reference in my
 “ last Annual Report was made to the unsatisfactory state
 “ of the Union Street sewer, and the hope was then expressed
 “ that the provision of an automatic flusher would improve
 “ matters. I am pleased to be able to add that the anticipa-
 “ tion has been realised from the fact that the sewer has not
 “ required scraping since. . . . The provision of a flap for
 “ the outfall sewer appears so far to have abated the annoy-
 “ ance due to foul effluvia from the manholes in Rothwell
 “ Road, and referred to in my last year’s report. In the
 “ event of any further complaints being made with regard
 “ to these manholes it will be advisable to have ventilating
 “ shafts erected in connection with the sewer concerned.
 “ The Sewage disposal works have been considerably im-
 “ proved by the addition of an acre of land, suitably drained ;
 “ further, it has been decided to level this plot and drain
 “ another. The completion of all these works should tend
 “ to the maintenance of that high standard of purity which
 “ both effluent and brook at present possess.”

FINEDON URBAN.—“ Six fresh connections to the main
 “ sewer have been made. . . . Four blockages occurred
 “ in the main sewer, and were removed.”

IRTHLINGBOROUGH URBAN.—“ A good many complaints
 “ have been made of bad smells—arising from the storm
 “ water drains, some of which still convey sewage matters
 “ from unconnected properties. It is most important, I think,
 “ that all street catch pits should be converted into gulleys.”

KETTERING URBAN.—“ The new works for Sewage
 “ Disposal are now approaching completion. All the tank
 “ work and the rearrangement and draining of the Storm
 “ Water Ground have been completed and at work for some
 “ months. The large Filter Beds which are to affect the final
 “ purification of the tank effluent are not in as forward a
 “ state as hoped owing principally to difficulties in obtaining
 “ material, but these are now well in hand and a small half
 “ of the total area has been completed, and it is expected
 “ that by the end of March next the work will be sufficiently
 “ near completion for the whole of the effluent to be dealt
 “ with on these beds.”

OUNDLÉ URBAN.—“ This is in good order and well
 “ flushed.”

RAUNDS URBAN.—“ The new tank at the sewage disposal
 “ works continues to give excellent results, and the effluent
 “ from the works has been very good throughout the year,
 “ although the land has been very much overworked—which
 “ must soon tell if further provisions are not made, as the
 “ volume of sewage will be greatly increased after the water-
 “ works have been completed. I think the matter of pro-
 “ viding filter beds should have the early consideration of
 “ the Council.”

ROTHWELL URBAN.—“ The town being situated on the
 “ slope of a hill, the place is favourable for good drainage.
 “ The Sewage Works are situated well below the level of the
 “ town. The separation of solids is done by settling tanks
 “ and straining. The area used for broad irrigation is 23
 “ acres.”

RUSHDEN URBAN.—“ Sewage and drainage are under
 “ constant supervision and show marked improvement.

“ The great majority of pail closets have been abolished, and,
 “ with the necessary addition of a large number of water
 “ closets, great pressure has been brought to bear upon the
 “ limited capacities at the sewage farm ; but up to the present
 “ there has been nothing to complain of.”

BRACKLEY RURAL.—“ Sewers have required attention
 “ in several villages, the result mostly of blocking caused by
 “ sticks being thrust down the gratings.”

BRIXWORTH RURAL.—“ Twenty-two parishes have
 “ sewers, which are in fair order. There are twenty-six
 “ filtration areas and two septic tanks with filters ; two with
 “ septic tanks only. About thirty acres of land is laid out
 “ for filtration purposes in the various parishes.” The
 flushing of the sewers “ is done by the Council throughout
 “ the district every fourteen days.”

DAVENTRY RURAL.—“ The Weedon Sewage Scheme has
 “ not advanced much during the year, but the delay for once
 “ does not rest on the shoulders of the local authority. After
 “ Mr. Smart’s scheme was rejected some fourteen months
 “ ago, the plans of Mr. Williams were adopted, at an estimated
 “ cost of £8,250 ; this is £2,000 more than Mr. Smart’s
 “ scheme was expected to cost. The plans prepared by Mr.
 “ Williams were sent to the Local Government Board on or
 “ about the 21st of last July, and we have been waiting ever
 “ since for the Board to hold an Inquiry in Weedon for the
 “ purpose of borrowing this £8,250. As our County Council
 “ has been rather pressing over this sewage scheme, it is well
 “ to draw attention to the fact that the present delay is due
 “ to the Local Government Board. The filter beds at Floore
 “ for overcoming the pollution of the river have been finished,
 “ and are in regular work. The Winwick sewage scheme is
 “ partly completed, and as soon as the fear of frost is over all

“ the work will be finished off. With regard to the Staverton
 “ sewage scheme the Local Government Board held an
 “ Inquiry at Staverton on the first day of last July to approve
 “ of your Council borrowing the sum of £1,150 for carrying
 “ out the works ; the plans were prepared by Mr. Williams
 “ and were practically approved of, but a few alterations in
 “ details were required, and these are now approved of by
 “ the Local Government Board. The village of Ashby St.
 “ Ledger has had a sewage scheme adopted and carried out
 “ privately. Certain repairs have been made to the Woodford
 “ Sewage Farm, and matters are now much more satisfactory.
 “ During the autumn your Council made what I consider a
 “ very important appointment ; that was a Public Health
 “ Engineer, whose duty it will be to look after the many
 “ sewage schemes and water works already in the district,
 “ and to prepare plans for the future ones that may have to
 “ be adopted.”

GRETTON RURAL.—“ In the parish of Gretton about
 “ 110 yards of 9 inch sewer has been laid, and seven new
 “ gullies have been provided in lieu of insanitary catch-pits.
 “ I would point out that the sewage from Gretton which is
 “ at present reaching the brook untreated could in my opinion
 “ be purified at but little expense, there being ample fall in
 “ which to effect it. Your late surveyor reports on the need
 “ for a sewer in the parish of Wakerley, a matter which I
 “ would commend to your consideration.”

HARDINGSTONE RURAL.—“ For the most part the
 “ sewage schemes have been working satisfactorily, and,
 “ with two exceptions there have been no complaints.
 “ Milton filter bed has been working for some years and its
 “ area is rather small, so it may shortly have to be enlarged.
 “ At Roade the filter bed has had to be renewed and it has
 “ since worked well. The settling-tank at Great Houghton

“ has been twice cleaned out during the year ; a complaint
 “ as to the effluent ditch is due in my opinion to the trampling
 “ and fouling by cattle. Complaints have just lately been
 “ received as to the Hardingstone and Yardley Hastings
 “ schemes, and are now under the consideration of the Council.
 “ In the former case the contamination probably comes from
 “ a farm drain which enters the effluent drain after it has left
 “ the sewage farm, and this admits of easy rectification.
 “ In the Yardley Hastings case the pollution of the brook is
 “ undoubtedly caused by the existence of an overflow pipe
 “ in the drain before reaching the tanks. This ought never
 “ in the first place to have been allowed, but it is difficult
 “ to see how it can now be done away with and the whole
 “ scheme may have to be remodelled.”

KETTERING RURAL.—At Burton Latimer, “ the septic
 “ tanks have been cleaned out and are working well, the
 “ outfall being good.” At Stanion, “ a new length of sewer
 “ would be beneficial in the main street, as the present one
 “ is an old stone drain in bad condition. . . . Pytchley.—
 “ The drains of this village, to which I called attention in
 “ last year’s report, were inspected by a Committee of the
 “ Council, and were found to be in a thoroughly bad con-
 “ dition, and the Council have already given instructions
 “ for new drains to be laid.” At Corby a new scheme for
 drainage is being prepared, at Cottingham 120 yards of old
 stone sewer are to be replaced by socketed pipes, at Middleton
 a new length of sewer is required, and at Thorpe Malsor a new
 septic tank is to be built.

NORTHAMPTON RURAL.—“ The sewage schemes in the
 “ various villages where they have been installed have been
 “ working well and there have been no complaints. Since
 “ the ventilators have been erected in Duston the smells
 “ have much decreased, but a large part of the new district

“ has not yet been taken over by your Authority, and before
 “ this is done much improvement will have to be made in the
 “ sewage system now existing there.”

OXENDON RURAL.—“ The Sewage and Drainage arrange-
 “ ments have been inspected and are satisfactory. The
 “ method of dealing with the sewage is by means of settling
 “ tanks : these are inspected frequently and cleared out once
 “ a month or once a quarter as necessary. The gratings and
 “ drains are disinfected each week and where necessary the
 “ sewers are flushed. At Clipston a new sewer has been laid
 “ at the Harborough Road end and a new sewer and ventilat-
 “ ing shaft close to the green. At East Farndon the old
 “ sewer in Mr. Goode’s field has been relaid and a settling
 “ tank built. Improvements have also been made in the
 “ sewers at Oxendon, Sulby, Stoke Albany, Sutton and
 “ Welford.”

THRAPSTON RURAL.—At Brigstock, “ the drainage is
 “ being improved and a new sewer has been laid. . . A
 “ septic tank and filter bed are being laid down in Islip for
 “ the lower end of the village. . . The sewage intercepting
 “ works at Woodford are now completed, and should prevent
 “ further pollution of the river.”

WELLINGBOROUGH RURAL.—“ A Local Government
 “ Board inquiry as to the drainage was held at Wilby and the
 “ scheme recommended is about to be commenced. All the
 “ sewage farms have been frequently inspected and are
 “ in a satisfactory condition. Wollaston will shortly require
 “ to be enlarged.”

RIVER POLLUTION.

The following few references to this subject may be read in connection with what has been recorded already, but do not call for any special comment at this time. They are noteworthy, however, as indicating that more watchfulness over the condition of streams in the County is being exercised locally than was formerly the case, and that the intervention of the County Council is not relied on as a necessary preliminary to remedial action.

RAUNDS URBAN.—“ The Raunds Brook continues to run
“ clean and since the new sewer was laid there have been very
“ few complaints about bad smells in summer, the open parts
“ being cleaned out when necessary.”

RUSHDEN URBAN.—“ A brook running into the Wash-
“ brook was found to be polluted with gas liquor, and this has
“ since been remedied.”

OXENDON RURAL.—“ The only complaints of river or
“ stream pollution which have arisen during the year are with
“ regard to the stream at the Middleton end of Ashley,
“ where the outfall from the settling tank empties into a
“ stream by the roadside.”

POTTERSPURY RURAL.—“ Complaint has been made of
“ the brook at Paulerspury, but this matter is engaging the
“ attention of the District Council.”

LODGING-HOUSES.

The few common lodging-houses in the County appear to be kept in a satisfactory manner, and to give rise to no complaints. It is evident that they are kept under regular supervision.

KETTERING URBAN.—“ Throughout the year this house
“ has been conducted satisfactorily.”

WELLINGBOROUGH URBAN.—“ There are two registered
“ lodging-houses. These have been visited periodically.”

POTTERSPURY RURAL.—The common lodging-house is
reported on as being satisfactory.

TOWCESTER RURAL.—“ There is only one registered
“ lodging-house (and that is in Towcester), and this has been
“ inspected at various unexpected times.”

SLAUGHTER-HOUSES.

The greater vigilance over the slaughter-houses, to which I referred in my last Annual Report as having become more noticeable generally throughout the County, appears to be well maintained. This is a very important matter, the neglect of which can only be detrimental to the condition of the meat supply for the community. It is very satisfactory to note that where necessary structural alterations have been required, and that cleansing and limewashing of premises have been insisted on.

BRACKLEY BOROUGH.—“ All in good order with the
“ exception of one, which is now under repair.”

HIGHAM FERRERS BOROUGH.—“ The slaughter-houses
“ have been under regular inspection and kept in a sanitary
“ condition.”

DESBOROUGH URBAN. — “ The slaughter-houses and
“ premises pertaining thereto have been frequently inspected
“ and the following nuisances have been reported and

“ abated :—Lime-washing, 5 ; accumulation of manure, 1 ;
 “ defective paving to yard, 1 ; sausage-house in need of
 “ cleaning, 1.”

FINEDON URBAN.—The Sanitary Inspector reports “ that
 “ he has inspected the slaughter-houses.”

IRTHLINGBOROUGH URBAN.—“ These have been periodic-
 “ ally inspected during the year and found fairly satis-
 “ factory.”

KETTERING URBAN.—It appears from the report of the
 Sanitary Inspector that “in connection with slaughter-houses
 “ and Premises, one nuisance has been abated and one yard
 “ newly paved. In two cases where Stables were in too close
 “ proximity to Slaughter-houses they have been parted by
 “ substantial walls. One cooking-house has been white-
 “ washed and more effective ventilation given.”

OUNDLÉ URBAN.—“ These have been regularly inspected
 “ and found clean and in good order.”

RAUNDS URBAN.—“ The regulations regarding slaughter-
 “ houses have been well carried out, and every slaughter-
 “ house in the district is in a thoroughly clean and sanitary
 “ state.”

ROTHWELL URBAN.—“ The Slaughter-houses, 5 in num-
 “ ber, were inspected and found to be in good order, with a
 “ good supply of water.”

WELLINGBOROUGH URBAN.—“ These have been visited
 “ regularly and inspected, and where defects were discovered
 “ they have been promptly remedied, and drainage and
 “ whitewashing have been carried out.”

BRACKLEY RURAL.—“ Slaughter houses have been
“ inspected and with one or two exceptions were found
“ satisfactory.”

BRIXWORTH RURAL.—“ The whole have been visited and
“ inspected. Six have been reported to the Council ; one
“ re-built ; three cleaned and lime-washed.”

KETTERING RURAL.—From the Sanitary Inspector’s
report it appears that the slaughter-houses were found,
“ with one or two exceptions, to be in a fairly clean con-
“ dition.”

OXENDON RURAL.—“ One slaughter-house was reported
“ for lime washing and accumulation of manure ; these were
“ remedied.”

THRAPSTON RURAL.—“ There are 17 slaughter-houses,
“ and these have been kept in a satisfactory state.”

TOWCESTER RURAL.—“ The nineteen slaughter-houses
“ in the district have each been visited twice in the year
“ and found in order.”

WELLINGBOROUGH RURAL.—“ Slaughter-houses have
“ been kept in a cleanly and satisfactory condition.”

DAIRIES, COWSHEDS, AND MILKSHOPS.

I am glad to be able to record at last that Regulations have been adopted in all the Districts of the County under the Dairies, Cowsheds, and Milkshops Order. It had become very obvious that the absence of Regulations in any District could be tolerated no longer, and it is therefore a satisfaction to know that all the Districts in this County have come into

line in the matter. It remains, however, to secure that the provisions of the Regulations shall be consistently carried out in each District, and that the responsibilities of District Councils in areas whence milk is sent to other localities shall be properly appreciated. First and foremost among the dangers attaching to impure milk is the risk that consumers run of contracting tuberculous disease therefrom. The fact that tuberculosis in animals is communicable to man, and that tuberculous meat and milk are a source of great danger to the community, is recognised generally throughout the civilised world ; but certain points have not been made quite clear yet, and investigations are still proceeding. Of these, investigations so as to determine the special characters of the bacilli which are the cause of tuberculosis in animals other than the cow, and the relationships of the different types of tubercle bacilli which have been encountered in man and certain of the lower animals, are still engaging the attention of the Royal Commission on Tuberculosis (Human and Bovine). In the meantime, however, one point of immense practical importance has been put on a footing which leaves very little room for doubt. The question whether milk from a tuberculous cow that did not show any disease of its udder was or was not dangerous to man has received special attention, and the experiments which have been embodied in the Third Interim Report of the Royal Commission, recently issued, are essentially conclusive that both the milk and the fæces of cows clinically tuberculous, but with no disease of the udder, are liable to contain living and virulent tubercle bacilli, and that the milk of such cows must be considered dangerous for human beings. In the face of these conclusions, the danger of housing tuberculous cows in company with healthy cows in a cowshed is of such sufficient practical importance as to emphasise the necessity for not only proper enforcement of the provisions of Regulations framed under the Dairies, Cowsheds, and Milkshops Order,

but to indicate also very clearly the need of skilled periodic inspection of dairy cattle as to their clinical condition. It is certainly as much in the interest of the milk producer as of the consumer that such care of dairy cattle should be instituted. Supervision of the kind has been in operation for some few years now in the Kettering Urban and Rural Districts and in the Desborough and Rothwell Urban Districts under a Joint Committee, and the reports of the Veterinary Inspector, Mr. Trevor Spencer, have proved of very great value; it is only due to him, moreover, to say that in his Report for 1907 he expressed the opinion, now confirmed by recent events, “that tubercle organisms are found “in milk from cows which show no evidence of udder mischief.” I am very glad, therefore, to know that the Wellingborough Urban District Council have moved in the matter of endeavouring to form a Joint Committee for their’s and the neighbouring Rural District, together with the Urban Districts of Finedon, Irthlingborough, and the Borough of Higham Ferrers, to work on the same lines as the Kettering, etc., Joint Committee; but it is a great disappointment to me to learn that the Wellingborough Rural District Council is averse to co-operation, and that in consequence the further consideration of the matter has had to be adjourned. I hope that in my next Annual Report I may be able to report favourable progress towards the constitution of the second Joint Committee for the Veterinary Inspection of dairy cattle, and that the example may be followed generally throughout the County. The following detailed references to the supervision of Dairies, Cowsheds, and Milkshops, in certain of the districts of the County are deserving of notice :—

BRACKLEY BOROUGH.—“There are five registered, all “of which are in good condition.”

HIGHAM FERRERS BOROUGH.—“ The dairies and cow-sheds have been regularly visited and found in good order.”

DESBOROUGH URBAN.—“ As the outcome of visits paid to the Dairies, Cowsheds and Milkshops, one dairy, kept in excellent condition, was found in such proximity to a pail-closet as would permit of flies from the latter gaining easy access to the former. This objectionable state of affairs having been brought to the notice of the owners the necessary structural alterations were in due course effected. In addition it was reported that one dairy and one cowshed were in need of lime-washing, and a second cowshed required suitable paving. The usual notices having been served upon those responsible, all these nuisances were speedily abated.”

FINEDON URBAN.—The new regulations “ came into force on the 17th of August, 1908. The usual inspections have been made.”

IRTHLINGBOROUGH URBAN.—“ These have been periodically inspected during the year and found fairly satisfactory.”

KETTERING URBAN.—“ There are 87 milk sellers in Kettering. Of these 37 have shops, 29 have shops and rounds, 15 have rounds only, and 6 supply wholesale only.”
The Report of the Veterinary Inspector—Mr. Trevor Spencer—on the conditions of the Cows and Cowsheds in the KETTERING URBAN AND RURAL DISTRICTS and the DESBOROUGH AND ROTHWELL URBAN DISTRICTS is as follows :—

“ I have the honour to report that during the past year I have made inspections of premises occupied by registered Cow Keepers to the number of 349, and an individual

“ examination, with especial regard to the condition of their
 “ Udders, of 3,124 Milking Cows. With reference to the
 “ sanitary state of the Cowsheds inspected, the following
 “ conditions were found to prevail, viz. :—Good or Satisfac-
 “ tory in 313 cases ; unsatisfactory or bad in 36 cases ;
 “ total, 349. It will be seen therefore that the sanitary
 “ condition of the Cowsheds in the period covered by the
 “ Report was unsatisfactory or bad in 10.31 cases per cent.
 “ A separate inspection of every Cow contributing to the
 “ public Milk Supply, and with especial regard to the con-
 “ dition of its udder, has been made with the following
 “ results : Number of Cows inspected 3,124. Number of
 “ abnormal udders 86, or 2.75 per cent. Of these deranged
 “ udders 24 or .76 per cent. were in a condition calculated
 “ to render the milk harmful to persons consuming it in an
 “ uncooked state ; the remaining 62 or 1.98 per cent. being
 “ cases of atrophied quarters or other abnormalities, which
 “ would not affect the quality of the milk. Of the 36 cow-
 “ sheds, the state of which was bad or unsatisfactory, the
 “ conditions met with were as follows :—General sanitary
 “ state bad in 7 cases ; insufficient light one case ; improper
 “ disposal of manure, 5 cases ; bad flooring or drainage, 14
 “ cases ; sewage-contaminated water, one case ; swine
 “ kept under the same roof, one case ; fowls roosting in the
 “ sheds, one case ; insufficient attention to general cleanliness,
 “ 6 cases. Of the 24 cases of udder disease, the Milk from
 “ which would be unfit for human consumption, 12 of these
 “ were due to acute Mastitis, 6 to chronic Mastitis, one to
 “ traumatic lesions, one to Gangrenous Mastitis, and 4 to
 “ Tubercular disease of the gland. Samples of milk from 15
 “ cases of udder derangement have been sent to the Clinical
 “ Research Association (London) for bacteriological examina-
 “ tion ; in fourteen of these cases the Milk was reported
 “ as being unfit for human use, and in four samples Tubercle
 “ bacilli were found to be present. In previous reports I

“ have called attention to what I regard as the pronounced
 “ inadequacy of the powers conferred on local Authorities
 “ by the present Dairies, Cowsheds, and Milkshops Orders.
 “ I have nothing to add to my previously expressed opinions.
 “ with regard to this matter, except to say that, until the
 “ scope of the Orders are widened, and its working made
 “ both universal and uniform, it will remain impossible for
 “ you to derive that amount of public benefit from your
 “ work which the vital importance of the subject demands.
 “ I beg to append a tabulated summary of this report for
 “ 1908 by the side of those for the five previous years.

	1903	1904	1905	1906	1907	1908
No. of Cowsheds inspected ...	282	286	315	350	348	349
No. Good or satisfactory ...	247	243	271	319	298	313
No. Bad or unsatisfactory	35 or 14.17%	29 or 10.13%	40 or 12.69%	31 or 8.85%	50 or 14.36%	36 or 10.31%
No. of Cows inspected ...	932	1731	2447	2984	2948	3124
No. of abnormal udders	38 or 4.07%	66 or 3.81%	79 or 3.22%	86 or 2.88%	81 or 2.78%	86 or 2.75%
No. of abnormal udders secret- ing harmful milk	7 or .75%	11 or .64%	17 or .69%	21 or .70%	19 or .64%	24 or .76%

OUNDLE URBAN.—“ These have been regularly inspected
 “ and found clean and in good order.”

RAUNDS URBAN.—These are said “ to be without defect
 “ as regards cleanliness and general sanitary condition.”

RUSHDEN URBAN.—“ A Veterinary Inspector has been
 “ appointed as Assistant Sanitary Inspector.” From his
 report, it appears that he examined cattle during each quarter
 of the year, the number of milch cows and heifers examined
 being 1,077 ; among these were 36 abnormal udders, of which
 31 were atrophied. The Sanitary Inspector also reports that
 “ the cowsheds are for the most part in good condition,
 “ but greater attention must be paid to the proper drainage
 “ of the yards through which the cows have to pass on their
 “ way to be milked. It was necessary on three occasions
 “ to draw the attention of the dairymen to the fact that the
 “ yards were so filthy that the cows’ udders would not only
 “ be splashed but would touch the filth as the animals
 “ walked through.”

WELLINGBOROUGH URBAN.—“ There are 17 cowsheds
 “ and 40 dairies and milkshops, which when visited were found
 “ in a satisfactory condition and all registered. Any defects
 “ were immediately corrected. Cowkeepers were strongly
 “ urged to be especially careful in the milking of the cows,
 “ and to observe the greatest cleanliness in all things con-
 “ nected with the milk.”

BRACKLEY RURAL. — “ The Regulations under the
 “ Dairies, etc., Order, 1885, came into force on April 1st,
 “ and many new ones have been registered and inspected.
 “ Much still requires to be done in some cases, particularly
 “ in regard to the flooring of cowsheds, to bring them up to
 “ the required standard.”

BRIXWORTH RURAL.—“ The whole have been visited
 “ and inspected. Fourteen have been reported to the
 “ Council—twelve for uncleanness (abated), one recon-
 “ struction, one new cowshed erected.”

DAVENTRY RURAL.—“ A very careful watch has been
 “ kept on the Dairies, Cowsheds, and Milkshops throughout
 “ the District, and in any cases where defects were
 “ found, steps were at once taken to have the matter put
 “ right.”

HARDINGSTONE RURAL.—“ The dairies and cowsheds
 “ are regularly inspected and are much cleaner and better
 “ ventilated than formerly. The Inspector tells me that
 “ arrangements for the milkers to wash their hands are in
 “ universal use. I am doubtful as to whether sufficient care
 “ is taken to cleanse the cows' udders before milking opera-
 “ tions. No difficulties have been found in administering the
 “ Acts, but any suggestions we make are immediately carried
 “ out.”

MIDDLETON CHENEY RURAL. — Regulations have “ been
 “ adopted in the district, and during the coming year several
 “ more dairies will come under inspection. This Act neces-
 “ sarily requires considerable alterations and improvements
 “ in the structure and sanitary arrangements of the numerous
 “ cowsheds and dairies which are instrumental in circulating
 “ a large quantity of milk and butter to the public both inside
 “ and outside the district. Already there is a reasonable
 “ amount of improvement in general management and
 “ sanitation, but there is still a great deal to be done, especially
 “ in the matter of new flooring and drainage, together with
 “ an improved system of transit than in unsealed milk cans,
 “ before milk can be considered free from contamination.
 “ The satisfactory working . . . will necessarily take some
 “ considerable time, especially when one remembers that
 “ the erection of new buildings or the renovation of old ones
 “ are matters which depend a great deal upon the existing
 “ relations of landlord and tenant.”

NORTHAMPTON RURAL.—“ Four fresh dairies were registered during the year, and two have been removed from the register as they have relinquished the business, so that there are now 32 on the register. They are all regularly inspected, and if minor faults have to be remedied they are at once done when any complaint is made. There has never been any difficulty in carrying out the Act.”

OUNCLE RURAL.—The dairies and cowsheds have “ been regularly inspected and found satisfactory. The number on the register is 19 ; of these, 13 supply their own neighbourhood, two send milk to London, one to London and Peterborough, and three send to Thrapston, Peterborough, and St. Albans respectively.”

POTTERSPURY RURAL.—These are reported as being satisfactory.

THRAPSTON RURAL.—“ There are now only eight registered cow keepers. During the year one cow-shed has had a new floor, and the walls have been plastered and twice lime washed. I find the buildings are well lime washed, but, in a few cases, the floors are not washed as often as they should be. It is very difficult to do this at times in country places where water is scarce.”

TOWCESTER RURAL.—“ The milk supply has been satisfactory, and the dairies, cowsheds, and milkshops (forty in number) have each been visited twice during the year and found to be kept in accordance with the regulations made and passed by the Rural District Council in 1906.”

WELLINGBOROUGH RURAL.—The Sanitary Inspector says, “ Dairies, cowsheds, and milkshops have been regularly inspected, and improved drainage, light, and ventilation

“ have been made at several of the farm premises. The
 “ dairies throughout the district are clean and well kept. . .
 “ When I find it necessary, I am empowered to call in the
 “ assistance of a Veterinary Surgeon to examine the udders
 “ or certify as to whether animals are suffering from
 “ tuberculous disease.”

FACTORIES AND WORKSHOPS (BAKEHOUSES).

The inspection of workplaces throughout the county, under the provisions of the Factory and Workshops Act, 1901, is evidently carried on by the local health-officers in an energetic and satisfactory manner, as may be gathered from the following extracts from the reports of the District Medical Officers of Health. The small number of underground bakehouses in the county is a matter for congratulation, and the procedure in the Rothwell Urban District of taking samples of water for analysis from wells supplying bakehouses is much to be commended. I hope that this example will be followed more generally in other districts.

BRACKLEY BOROUGH.—“ There are 15 workshops on the
 “ register ; they have been inspected and found to comply
 “ with the conditions of the Act. Bakehouses :—All in
 “ satisfactory condition.

HIGHAM FERRERS BOROUGH.—“ I have visited the
 “ various factories in the town and have found nothing of
 “ importance in their sanitary arrangements to complain of.
 “ The workshops and homeworkers' premises have been
 “ regularly inspected, and lists of outworkers have been
 “ supplied. No prosecutions have been found necessary
 “ as any sanitary improvements suggested by the officer
 “ have been readily carried out. The bakehouses have been
 “ frequently visited and kept in proper order.”

DESBOROUGH URBAN.—“ In company with your Sanitary Inspector, I have systematically visited and inspected the factories and workshops of the district, and, taken generally, the requirements of the Factories and Workshops Act, 1901, have been found satisfactorily carried out. Eighteen inspections of factories and twenty-eight of workshops were made, and 23 defects having relation to sanitary accommodation, want of cleanliness, ventilation, and other nuisances were found. There were in addition 156 inspections of Outworkers' premises. The lists received from employers numbered 16, and the outworkers specified thereon, 410. The registered workshops total 24. There are no underground Bakehouses in the District. There was one instance of outwork in infected premises. Closely associated with one bakehouse, which was in need of lime-washing, there was found the keeping of pigeons and rabbits, under conditions unlikely to promote sanitation. On written notices having been served upon the occupiers of the several factories and workshops, all the defects referred to above were speedily remedied. In no instance was it necessary to prosecute. Outworkers' employment in this district consists of boot and shoe work and corset making. A prominent feature observed during these and former inspections of the factories and workshops was their ill-ventilation. Ventilators were provided in the factories according to regulations, but were frequently found closed, owing to the action of the workers themselves. Many of the workshops were deficient in ventilators, and here too, advantage was not taken of such simple measures as the opening of doors and windows. If the workers would but give serious consideration to the evil effects of breathing impure air, they would speedily realise the danger to health caused by their short-sighted policy.”

FINEDON URBAN.—“The proper Lists of Outworkers
 “have been received. The Factories, Workshops, and Out-
 “workers’ premises have been inspected, and it has not been
 “necessary to make any report to H.M. Inspector of Fac-
 “tories, or to take any legal steps to enforce the Act. It is
 “interesting to note that there has not been a single case of
 “accident occurring in any factory or workshop reported
 “to the Certifying Surgeon during the year.”

IRTHLINGBOROUGH URBAN. — “Factories, Workshops,
 “and Workplaces have been periodically inspected during
 “the year by your Inspector or myself, and in most respects
 “the requirements of the Act have been satisfactorily carried
 “out. The w.c.’s are now receiving more attention and are
 “being kept in a more cleanly state, although there is still
 “room for improvement. The occasional surprise visits
 “of your Inspector do good. In those factories in which
 “the flushing arrangements are dependent on the town water
 “supply, the manufacturer should issue special instructions
 “for regular hand flushing to be done in the event of the
 “town supply failing. The standard for sanitary con-
 “veniences in factories has been fixed at 1 for 25 females and
 “1 for 30 males. Bakehouses have been regularly inspected
 “and found very satisfactory with the exceptions mentioned
 “in your Sanitary Inspector’s report. There are no under-
 “ground bakehouses. The number of Outworkers is becom-
 “ing less year by year, and the lists have been regularly
 “sent.”

KETTERING URBAN.—There appears to be only one under-
 ground bakehouse, and, after reference to the statistical
 tables and the detailed reports of the Sanitary Inspector
 and the Lady Inspector, it is pointed out that “although
 “more inspections have been carried out, it is gratifying
 “to find fewer defects that required attention.”

OUNCLE URBAN.—“The workshops on the Register
“have been inspected and found satisfactory as to lighting,
“ventilation, and lavatory accommodation.”

RAUNDS URBAN.—The bakehouses are said “to be
“without defect as regards cleanliness and general sanitary
“condition. . . . Sec. 2 of the Public Health Acts has
“been adopted here, and a standard of efficiency and suit-
“ability of sanitary accommodation has been fixed and
“enforced. Much more work is now being done at home
“by women than has been the case for some years, it is,
“however, of the cleanest and healthiest description of shoe
“work, and I have no reason to think that it has any bad
“effect on the health of the workers who carry it on under
“healthy conditions. Lists of Outworkers: The home-work
“in this district consists of boot and shoe work. During the
“year 11 lists of outworkers have been received from 11
“employers, showing the number of outworkers as 1,401.
“Eighty-seven addresses of outworkers have been received
“from other Councils and 410 have been forwarded to
“other Councils. The figures 1,401 and 410 are approxi-
“mately double the number of individual workers whose
“names are given, since in the February and August lists
“of the same employer the same outworkers’ names are
“often repeated. No prosecutions were made for failing to
“keep or permit inspection of lists, nor for failing to send
“lists in. There are 18 registered workshops in the district,
“consisting of shops carried on by curriers, tailors, dress-
“makers, milliners, basket makers, bicycle makers, bakers,
“and letterpress printers, and laundry workshop. There
“are no underground bakehouses in the district.”

ROTHWELL URBAN.—“Inspections during the year
“number 30. One list of outworkers was received from
“another Council and one sent to another Council. Eight

“ lists were received from employers in Rothwell. All the
 “ factories have been visited. Insufficient sanitary accom-
 “ modation was found in one case. This has been remedied.
 “ There are 15 registered workshops in the district. These
 “ have been inspected during the year. . . . There are
 “ 6 bakehouses in Rothwell ; none of them are underground
 “ bakehouses. On inspection these were found to be in a
 “ satisfactory condition. Some are supplied with water from
 “ wells on the premises. During the year samples of water
 “ were taken from these wells for examination. The rest of
 “ the bakehouses have the town supply of water.”

RUSHDEN URBAN.—“ There are 172 Factories and
 “ Workshops on the register, and these have been regularly
 “ inspected.” From the Sanitary Inspector’s report, the
 following additional facts are obtained :—“ Two notices
 “ were received from one of H.M. Inspectors of Factories
 “ calling attention to the want of sufficient w.c. accommoda-
 “ tion for the use of the females employed in 2 of our factories.
 “ In one instance there were 123 females employed and only
 “ four w.c.’s provided, and in the other case 83 females
 “ employed and two w.c.’s provided. In both cases this
 “ was remedied and one w.c. provided for the use of each
 “ 25 of the workers, which is the rule followed in this District.
 “ In two other factories I found that proper precautions
 “ had not been taken to screen off the w.c.’s for the use of
 “ the women workers from those allocated to the men, one
 “ factory had no water closet for the use of the females,
 “ and another had none for the use of the male workers.
 “ These matters have all been brought to the notice of the
 “ employers concerned and remedied. Seventy-seven lists of
 “ outworkers have been received relating to 1,237 outworkers.
 “ These figures include six lists relating to 22 outworkers
 “ received from other local authorities. Fifty-five lists
 “ relating to 205 outworkers have been forwarded to other

“ local authorities. The work at which the outworkers were
 “ engaged was principally connected with boot and shoe
 “ making and processes incidental thereto. . . . There
 “ are 18 bakehouses on the Register and these are regularly
 “ visited. Attention was called to the necessity for white-
 “ washing in several instances and this received prompt
 “ attention.”

WELLINGBOROUGH URBAN.—“ The requirements of the
 “ Factories and Workshops Act of 1901 have been duly
 “ attended to and enforced. Where notices have been served
 “ for improvements or alterations, they have been properly
 “ carried out.”

BRACKLEY RURAL. — “ The Bakehouses have been
 “ inspected and with one or two exceptions were found satis-
 “ factory. . . . I have inspected the workshops remaining
 “ on the register and found their condition satisfactory.”

BRIXWORTH RURAL.—“ Factories, laundries, and work-
 “ shops have been visited and kept clean and ventilated. . .
 “ One new bakehouse erected ; four reported for not lime-
 “ washing out.”

DAVENTRY RURAL.—“ A good deal of time has been
 “ spent during the year in visiting the Factories, Workshops
 “ and Workplaces throughout the District, as required by the
 “ Factory and Workshop Act of 1901, but as our District
 “ is mostly agricultural these are not very numerous. Still
 “ a watchful eye has been kept on those that do exist, and
 “ especial attention has been paid to the outworkers. As a
 “ rule we found things in a fairly satisfactory state and the
 “ different sections of the Act complied with. We have no
 “ underground bakehouses in the District, and the Sanitary
 “ Inspector took care to see that all the bakers kept their

“ bakehouses in a properly clean state. We have still
 “ trouble in obtaining the February and August lists of out-
 “ workers ; it is not right that the Sanitary Inspector should
 “ almost have to beg these lists. I would suggest that in
 “ February next, the Defaulters be summoned, and examples
 “ made of a few cases.”

HARDINGSTONE RURAL.—“ A Table is enclosed giving
 “ details as to the administration of the Factory and Work-
 “ shop Act. Unfortunately, the large boot and shoe factory
 “ at Cooknoe has just been completely burnt down and will
 “ have to be entirely re-built. The number of inspections
 “ carried out is given in the Table, and whenever any com-
 “ plaint has been made it has been immediately rectified,
 “ so that there has been no difficulty experienced in the work-
 “ ing of the Act. The fellmongering factory in Hardingstone
 “ parish is working smoothly : there is now no pollution of
 “ the river, and the smells, though at times slightly prevalent,
 “ are not so bad as they were at one time. The bakehouses
 “ are clean and regularly white-washed, and there are no
 “ underground bakehouses.”

KETTERING RURAL.—“ All the Factories have been
 “ inspected, and the lavatory accommodation is now sufficient
 “ in all of them and they are kept much cleaner than
 “ formerly.”

NORTHAMPTON RURAL.—“ The one small factory at
 “ Kislingbury is visited monthly, and the workshops are
 “ inspected every other month ; very few complaints have
 “ had to be made, and in every case when a defect has been
 “ notified it has been at once remedied. The bakehouses are
 “ clean and regularly whitewashed ; there are no under-
 “ ground bakehouses.”

OUNCLE RURAL.—The “ factories and workshops have
 “ been regularly inspected twice a year and found satis-
 “ factory. This being a purely agricultural district there
 “ is very little to do under the Factory and Workshops
 “ Act.”

OXENDON RURAL.—“ There is rather a larger number of
 “ out-workers from the factories this year, viz., 77 as com-
 “ pared with 44 last year ; of these, 10 are from Braybrooke
 “ and 67 from Welford. No matter in connection with
 “ them has arisen during the year.” The bakehouses are
 said to be in good order.

POTTERSPURY RURAL.—The “ factories are kept in a
 “ clean state, have no wet floors, are free from effluvia arising
 “ from any drain, water-closet, etc., are not overcrowded, are
 “ properly ventilated, and have suitable sanitary accommo-
 “ dation. No home work is given out, and an abstract of the
 “ Act is affixed where required by Section 133. Provision is
 “ also made for safety from fire.” The bakehouses are said
 to be satisfactory.

THRAPSTON RURAL.—“ In six cases want of cleanliness
 “ was found, in one case want of drainage of floors, in another
 “ deficient sanitary accommodation, and in fourteen others
 “ various nuisances. All these defects were remedied without
 “ having recourse to prosecution. One hundred and seventeen
 “ inspections were made of outworkers' premises, and fourteen
 “ defects remedied by request. The inspection of Bake-
 “ houses . . . has been systematically carried out. The
 “ Sanitary Inspector states ‘ there are 23 bakehouses in the
 “ ‘ district and, with the exception of one case, they have
 “ ‘ always been found in fairly good condition, and, in some
 “ ‘ instances, extremely good condition. The bakehouse

“ ‘ which was unsatisfactory had a thatched roof.’ This
 “ house is now in good condition, having been ceiled and
 “ well plastered and whitewashed.”

TOWCESTER RURAL.—“ The bakehouses are 25 in num-
 “ ber, and have each been visited twice in the year: no
 “ fault was found except that one needed whitewashing,
 “ and this was done. . . The Workshops and Workplaces
 “ in the district have been visited in conformity with the
 “ Factory and Workshops Act, 1901, and no action found
 “ necessary. Section 22 of the Public Health Acts Amend-
 “ ment Act of 1890, which deals with the provision of sufficient
 “ sanitary conveniences in Factories, has not been adopted
 “ by the District Council.”

WELLINGBOROUGH RURAL.—According to the Sanitary
 Inspector, “ factories, workshops, and workplaces have been
 “ visited periodically during the year. Matters requiring
 “ attention have been brought to the notice of the employers
 “ and remedied. Bakehouses have been visited and with
 “ two or three exceptions were found satisfactory, and in these
 “ cases whitewashing was at once attended to.”

FOOD INSPECTION.

There are but few references to the matter of food inspec-
 tion, but, as far as they go, they are of a fairly favourable
 character. It certainly is very important that a vigilant eye
 should be kept on all meat exposed for sale for the food of man
 —whether set out on market stalls or in butcher’s shops—
 and that tainted fish, particularly in warm weather, should
 be detected and destroyed. Vigilance in the inspection of
 carcasses in the rural districts ought never to be relaxed,
 when it is remembered how easily an inferior beast can be

slaughtered and the meat dressed without attracting special attention. The activity shown in this direction in the Daventry Rural District has been more than repaid already.

IRTHLINGBOROUGH URBAN.—“ There has been no seizure
“ of any unsound food or meat.”

KETTERING URBAN.—It appears from the Sanitary Inspector's report that “two lots (15 baskets) of straw-
“ berries, five pieces of fish and a quantity of unsound
“ pears, being adjudged to be unfit for human food, were
“ condemned and destroyed. In one case proceedings were
“ taken.”

WELLINGBOROUGH URBAN.—“ There were no detected
“ cases of meat, game, or fruit unfit for human food. Four
“ cwt. of fish was surrendered voluntarily.”

DAVENTRY RURAL.—“ Much attention has also been
“ paid to the sale of meat throughout the District; the
“ conviction obtained on the first day of the year as reported
“ in my last Annual Report has, I think, had a very good
“ effect; frequently a butcher when he now finds anything
“ suspicious sends for the Sanitary Inspector before offering
“ the meat for sale.”

POTTERSPURY RURAL.—No case of unsound food was reported during the year.

CEMETERIES.

The only case under this heading that appears in the Reports of the District Medical Officers of Health is the following :—

OUNDLE RURAL.—“ I was asked by the Kingscliffe
 “ Parish Council to visit and report on a proposed site for a
 “ cemetery. The ground which it is contemplated to use
 “ is part of a field on the Blatherwick Road, about a quarter
 “ of a mile from the village. It is sloping ground and there
 “ is a dry subsoil. I advised it was as good a position as
 “ could be obtained.”

BYE-LAWS.

Pursuant to a resolution, and at a meeting of the Towcester Rural District Council, on the fourth day of August, 1908, Bye-laws were made with respect to Nuisances in that portion of the Rural District of Towcester which comprises the contributory place of Towcester. These were allowed by the Local Government Board on the fourth day of February, 1909, and not the least important of them is that which prohibits the keeping of swine within the distance of 50 feet from any dwelling-place, unless the sty or place in which such swine are kept be maintained in a cleanly and wholesome condition. This is a provision which will remove the likelihood of similar complaints to those that have been made on occasion in past years.

CHARLES E. PAGET,

County Medical Officer of Health.

County Hall, Northampton,

May, 1909.

LIST OF DISTRICT MEDICAL OFFICERS OF HEALTH FOR 1909.

DISTRICT.	MEDICAL OFFICER OF HEALTH.		RESIDENCE.
URBAN :—			
Brackley (Borough)	J. S. Fenton, M.D., D.P.H.	...	Brackley
Daventry (Borough)	C. E. Oldacres, M.R.C.S.	...	Daventry
Higham Ferrers (Borough)	...	F. D. Crew, M.B. ...	Higham Ferrers
Desborough	...	H. Gibbons, M.D. ...	Desborough
Finedon	H. Burland, M.R.C.S.	Finedon
Irthlingborough	...	W. Robb, M.B., J.P. ...	Irthlingborough
Kettering	J. Allison, M.D., D.P.H.	Kettering
Oundle	B. R. Turner, M.B. ...	Oundle
Raunds	W. Mackenzie, L.R.C.P.	Raunds
Rothwell	J. More, M.R.C.S. ...	Rothwell
Rushden	F. H. Morris, M.D. ...	Wellingborough
Wellingborough	...	W. W. Clark, M.D., J.P.	Wellingborough
RURAL :—			
Brackley	G. N. Stathers, M.R.C.S., D.P.H.	Brackley
Brixworth	R. Winterbotham, M.R.C.S. ...	Brixworth
Crick	G. Wilson, M.D., D.P.H. ...	Warwick
Daventry	A. R. Darley, M.D. ...	West Haddon
Easton-on-the-Hill	T. P. Greenwood, M.R.C.S.	...	Stamford
Gretton	J. E. O'Connor, M.B., D.P.H.	Kirby Muxloe, Leicester
Hardingstone	...	G. H. Percival, M.B. ...	Northampton
Kettering	L. W. Dryland, M.R.C.S., D.P.H.	Kettering
Middleton Cheney	J. I. Johnson, L.R.C.P.	...	Sulgrave, Banbury
Northampton	...	G. H. Percival, M.F.	Northampton
Oundle	C. N. Elliott, M.B., J.P.	Oundle
Oxendon	C. T. Scott, M.B. ...	Market Harborough
Potterspury	...	T. S. Maguire, M.D. ...	Stony Stratford
Thrapston	C. N. Elliott, M.B., J.P.	Oundle
Towcester	C. Simpson, M.B. ...	Towcester
Wellingborough	...	F. H. Morris, M.D. ...	Wellingborough

SUMMARY OF REPORTS OF THE DISTRICT
MEDICAL OFFICERS OF HEALTH.

NAME OF DISTRICT.	PROMINENT FEATURES OF REPORT
BRACKLEY BOROUGH.	<p>(a) Low general and infantile mortalities.</p> <p>(b) Small amount of notifiable zymotic sickness.</p> <p>(c) Completion of new well and pumping station for public water supply.</p> <p>(d) Condemnation of certain houses in the town.</p>
DAVENTRY BOROUGH.	<p>(a) Fairly low general, but rather high infantile, mortality.</p> <p>(b) Small amount of notifiable zymotic disease.</p> <p>(c) Increasing number of unvaccinated children.</p> <p>(d) Additions and alterations being made to Infectious Diseases Hospital.</p>
HIGHAM FERRERS BOROUGH.	<p>(a) Low general and infantile mortalities.</p> <p>(b) Absence of notifiable zymotic sickness.</p> <p>(c) Satisfactory condition of public water supply.</p> <p>(d) Need for reconstruction of certain old sewers.</p>

NAME OF DISTRICT.	PROMINENT FEATURES OF REPORT.
DESBOROUGH URBAN.	<p>(a) High general, but fair infantile, mortality.</p> <p>(b) Not large amount of notifiable zymotic sickness, but epidemic of Whooping Cough, and prevalence of Influenza.</p> <p>(c) Acquisition of a Steam Disinfecter strongly urged.</p> <p>(d) Area of Sewage Disposal Works extended.</p> <p>(e) Surroundings of the Public Water Supply Station improved.</p>
FINEDON URBAN.	<p>(a) Low general, but high infantile, mortality.</p> <p>(b) A few cases of Scarlet Fever, but otherwise small amount of notifiable zymotic sickness.</p> <p>(c) Continued satisfactory condition of the public water supply.</p> <p>(d) Adoption of Regulations under the Dairies, Cowsheds, and Milkshops Order.</p> <p>(e) Medical Examination of School Children commenced.</p>
IRTHLINGBOROUGH URBAN.	<p>(a) Low general and infantile mortalities.</p> <p>(b) Some prevalence of Scarlet Fever, otherwise small amount of zymotic sickness.</p>

NAME OF DISTRICT.	PROMINENT FEATURES OF REPORT.
	<p>(c) Serious condition of the public water supply, owing to deficiency of water.</p> <p>(d) Attention paid to scavenging and the disposal of house refuse.</p> <p>(e) Consideration as to adoption of certain parts of the Public Health Acts Amendment Act 1907.</p>
KETTERING URBAN.	<p>(a) Low general, but rather high infantile, mortality.</p> <p>(b) Large prevalence of Scarlet Fever, Whooping Cough, and Measles.</p> <p>(c) Need for a Public Disinfecting Station for bedding and clothing.</p> <p>(d) Valuable influence of the Isolation Hospital.</p> <p>(e) Public water supply proved to be sufficient and satisfactory during the year.</p> <p>(f) Reconstruction of Sewage Disposal Works approaching completion.</p>
OUNCLE URBAN.	<p>(a) Low general and infantile mortalities.</p> <p>(b) Small amount of notifiable zymotic disease.</p> <p>(c) Need for use of Isolation Hospital of the Oundle Rural</p>

NAME OF DISTRICT.	PROMINENT FEATURES OF REPORT.
	District, and of the Disinfecting apparatus.
	(d) Special inspection of cottage property in the District, and some cottages pulled down being unfit for habitation.
RAUNDS URBAN.	<p>(a) Low general, but high infantile, mortality</p> <p>(b) Some Scarlet Fever prevalence, otherwise small amount of notifiable zymotic sickness.</p> <p>(c) Good progress made with the scheme for a public water supply.</p> <p>(d) Improvements at sewage disposal works likely to become necessary.</p>
ROTHWELL URBAN.	<p>(a) Low general, but high infantile, mortality.</p> <p>(b) Some prevalence of Scarlet Fever, and an epidemic of Whooping Cough.</p> <p>(c) Public water supply satisfactory, but lessened quantity of water due to diminished rainfall.</p>
RUSHDEN URBAN.	<p>(a) Low general, but rather high infantile, mortality.</p> <p>(b) Considerable prevalence of Scarlet Fever, Diphtheria, and Whooping Cough.</p>

NAME OF DISTRICT.	PROMINENT FEATURES OF REPORT.
WELLINGBOROUGH URBAN.	(c) Disinfection of premises after voluntary notification of Phthisis.
	(d) Certain groups of old houses requiring attention.
	(e) Appointment of Veterinary Inspector for the examination of dairy cattle.
	(a) Low general, but rather high infantile, mortality.
	(b) Epidemic of Scarlet Fever, and prevalence of Whooping Cough.
BRACKLEY RURAL.	(c) Some small improvements at the Isolation Hospital.
	(d) New system of softening being applied to the public water supply.
	(e) Appreciation of the work of the Health Visitor.
	(a) Rather high general and infantile mortalities.
BRIXWORTH RURAL.	(b) Small amount of notifiable zymotic sickness.
	(c) Some replacement of old cottages at Thorpe Mandeville.
	(d) Regulations for Dairies, Cowsheds, and Milkshops now in force.
	(a) Fair general and infantile mortalities.

NAME OF DISTRICT.	PROMINENT FEATURES OF REPORT.
	<p>(b) Some prevalence of Scarlet Fever and outbreaks of Whooping Cough.</p> <p>(c) More attention paid to the condition of Dairies and Cowsheds, Bakehouses, and Slaughter-houses.</p> <p>(d) Increasing number of unvaccinated children.</p>
CRICK RURAL.	<p>(a) Rather high general, but low infantile, mortality.</p> <p>(b) Freedom of district from prevalence of infectious sickness.</p> <p>(c) Plans for Joint Hospital not yet submitted for approval to the Local Government Board.</p>
DAVENTRY RURAL.	<p>(a) Fair general, and low infantile, mortality.</p> <p>(b) Some prevalence of Scarlet Fever, and of Whooping Cough, but no necessity to advise the closure of schools.</p> <p>(c) Enlargement of the infectious diseases hospital at Daventry urgently asked for.</p> <p>(d) Progress in regard to Sewage Disposal Schemes, and appointment made of a Public Health Engineer to look after such.</p>

NAME OF DISTRICT.	PROMINENT FEATURES OF REPORT.
	<p>(e) Attention paid to meat exposed for sale.</p> <p>(f) Question of dealing with house refuse in some of the larger villages under consideration.</p>
GRETTON RURAL.	<p>(a) Rather high general death-rate among aged persons, but no infantile mortality.</p> <p>(b) Some Scarlet Fever prevalence in Gretton and Wakerley.</p> <p>(c) System of scavenging instituted at Gretton.</p> <p>(d) Sewage disposal scheme required at Gretton, and a main sewer at Wakerley.</p>
HARDINGSTONE RURAL.	<p>(a) Fairly low general, but high infantile, mortality.</p> <p>(b) Small amount of ordinarily notifiable sickness, but some prevalence of Chicken Pox and Whooping Cough.</p> <p>(c) Rather more attention needed in supervision of various sewage disposal schemes.</p> <p>(d) Better supervision over dairies and cowsheds.</p>
KETTERING RURAL.	<p>(a) Low general and infantile mortalities.</p> <p>(b) Large prevalences of Scarlet Fever and Measles.</p>

NAME OF DISTRICT.	PROMINENT FEATURES OF REPORT.
MIDDLETON CHENEY RURAL.	<p>(c) New public water supplies for Burton Latimer and Stanion satisfactory, and scheme for Corby in preparation.</p> <p>(d) Works of drainage in hand or to be carried out at Pytchley, Corby, Stanion, and other villages; septic tank to be constructed for Thorpe Malsor.</p>
NORTHAMPTON RURAL.	<p>(a) Fair general and infantile mortalities.</p> <p>(b) Small amount of notifiable zymotic sickness.</p> <p>(c) Decreasing population, and consequent disrepair of cottage property.</p> <p>(d) Adoption of Regulations under the Dairies, Cowsheds, and Milkshops Order.</p> <p>(a) Rather high general, but fair infantile, mortality.</p> <p>(b) Some prevalence of Scarlet Fever and Whooping Cough, but freedom from Enteric Fever.</p> <p>(c) Improved ventilation of sewers at Duston.</p> <p>(d) Water supply to Duston and Weston Favell from the mains of the Borough of Northampton.</p>

NAME OF DISTRICT.	PROMINENT FEATURES OF REPORT.
OUNDLE RURAL.	<p>(e) Increase of dairies in the District.</p> <p>(a) Rather high general, but fair infantile, mortality.</p> <p>(b) Small amount of notifiable zymotic sickness, but some prevalence of whooping cough and Measles.</p> <p>(c) Continued usefulness of the Isolation Hospital.</p> <p>(d) Improved housing conditions in some villages.</p> <p>(e) Proposed public water supply for Kingscliffe.</p>
OXENDON RURAL.	<p>(a) Fair general, and low infantile, mortality.</p> <p>(b) Small amount of notifiable zymotic sickness, but two small outbreaks of diphtheria.</p> <p>(c) Improvements made in matters of sewerage, but outfall at Ashley needs attention.</p> <p>(d) Some increase in the number of out-workers for factories.</p>
POTTERSPURY RURAL.	<p>(a) High general, but low infantile, mortality.</p> <p>(b) Some prevalence of Scarlet Fever and Diphtheria.</p> <p>(c) Public water supplies satisfactory, but schemes for</p>

NAME OF DISTRICT.	PROMINENT FEATURES OF REPORT.
	<p>Potterspury and Paulerspury not yet decided on.</p> <p>(d) Pollution of stream at Paulerspury receiving attention of District Council.</p>
THRAPSTON RURAL.	<p>(a) Fair general, but low infantile, mortality.</p> <p>(b) Outbreak of Diphtheria at Thrapston, and interesting account of suspected "carrier" case. Some Scarlet Fever in a few villages.</p> <p>(c) Need for public scavenging, and public water supply at Thrapston.</p> <p>(d) Sewage disposal schemes completed at Islip and Woodford.</p>
TOWCESTER RURAL.	<p>(a) High general, but low infantile, mortality.</p> <p>(b) Outbreak of Diphtheria at Silverstone, and a few other cases in other parts of district.</p> <p>(c) Complaints as to the delivery of water at Towcester due to defective pumping machinery.</p> <p>(d) More attention being paid to sanitary accommodation for dwelling-houses.</p>

NAME OF DISTRICT.	PROMINENT FEATURES OF REPORT.
WELLINGBOROUGH RURAL.	<ul style="list-style-type: none"><li data-bbox="651 270 1328 381">(a) Low general, but high infantile, mortality.<li data-bbox="651 394 1328 504">(b) Some prevalence of Scarlet Fever and Whooping Cough.<li data-bbox="651 517 1328 793">(c) Scheme for public water supply at Isham sanctioned, and arrangements being made for Irchester and Wollaston Parishes.<li data-bbox="651 806 1328 1030">(d) Sewage disposal scheme for Wilby in hand, and extension of sewer at Little Irchester carried out.

APPENDIX I.

REPORT OF THE COUNTY MEDICAL OFFICER OF HEALTH
TO THE PUBLIC HEALTH COMMITTEE ON THE WORK OF THE
HEALTH VISITOR.

I beg leave to submit herewith a report on the work of the Health Visitor, from October 14th, 1907, to July 31st, 1908.

The work of the Health Visitor has been of a two-fold character :—

- (a) Primarily, watching over the upbringing of infants,
and
- (b) Secondly, house to house inspection of certain
areas.

(A.)

In regard to the visitation of mothers and babies, this has proceeded from the commencement of her employment in certain areas of the Wellingborough Urban District, and in the whole of the Finedon Urban District, and, since January 1st, 1908, in the Rushden Urban District also. The work done in the Finedon and Rushden Urban Districts is in connection specially with the inquiry, instituted by the Home Office, as to the effect of female labour on infantile mortality.

I submit herewith a condensed table which shortly summarises the scope of the work of the Health Visitor, and in the reading of this table it should be noted that it cannot be regarded as complete in details, for, as will be shewn later on, a certain number of babies have been seen once only. It must be remembered also that correct statistics of mortality cannot be given as yet, or until a clear year has passed since the birth of the infants who have been visited. The table is interesting, however, as showing the proportions of the

different methods in the feeding of babies, and the extent to which this important matter of feeding requires watching. I think it is satisfactory also to note the number of occasions on which the Health Visitor has thought it desirable that the advice of a medical man should be sought, and it is probable that such timely interference may prove to have been of value in the reduction of infantile mortality. This action of the Health Visitor appears to have been exceedingly valuable in six cases at Wellingborough, one at Finedon, and two at Rushden. So, likewise, marked improvement in the progress of infants, where mothers have followed advice given from time to time by the Health Visitor, can be recorded in 28 cases at Wellingborough, 13 cases at Finedon, and 19 cases at Rushden. In 11 instances at Wellingborough, 4 at Finedon, and 12 at Rushden, the Health Visitor has visited houses, at the request of parents, where babies had been born before the commencement of her work, and at no house where she has visited has she been refused the information required.

TABLE A.

Table summarising the work of the Health Visitor in relation to new-born infants, October 14th, 1907, to July 31st, 1908 :—

	District.			Total.
	Wellingborough.	Finedon.	Rushden.	
BABIES VISITED.	200	73	144	417
Breast fed	105	47	84	236
Partly breast fed	51	15	36	102
Bottle fed	44	11	24	79
Healthy at Birth	176	67	136	379
Weakly at Birth	24	6	8	38

ADVICE AND ASSISTANCE WITH BABIES

GIVEN BY VISITOR AS TO :—

	District.			Total.
	Wellingborough.	Finedon.	Rushden.	
Bathing of Eyes	6	3	4	13
Cleaning	19	11	5	35
Clothing	18	17	22	57
Colds, etc.	14	15	16	45
Confinement indoors	13	7	2	22
Feeding in special cases	82	24	61	167
Improper use of spirits	1	—	—	1
„ tea	2	—	—	2
Intestinal troubles ...	29	11	14	54
Keeping too warm ...	1	1	—	2
Kind of feeding bottle	17	7	18	42
Ventilation of bedroom	4	3	1	8
ADVICE TO CALL IN MEDICAL MAN	15	8	10	33

DEATHS :—

Broncho-pneumonia	2	1	—	3
Marasmus	3	2	—	5
Whooping-cough	3	—	1	4
Tuberculosis	—	1	—	1
Convulsions	—	2	1	3
Hæmorrhage	—	1	—	1
Enteritis	—	—	1	1

The following are fair examples of the kind of cases in which the advice of the Health Visitor has proved of essential value :—

“ Improper food and clothing—all kinds of food given.”

“ Improper food and ringworm.”

“ Improper food and clothing ; also cleansing of eyes.”

- “ Indigestion and sickness—mother’s milk unsuitable.”
 “ Over-feeding, losing in weight.”
 “ Irregular feeding and constipation.”
 “ Ophthalmia neonatorum ; Doctor called in.”
 “ Daily bath and fresh air needed.”
 “ Improper food (patent) not needful ; diluted cow’s milk given.”
 “ Giving child brandy and tea or any kind of liquors.”

TABLE B.

District.	Note Book.	1st Visit.	Re-visits.	Total Visits.
Wellingborough Urban ...	(i.)	99	466	565
„	... (ii.)	101	170	271
				— 836
Finedon Urban	(i.)	73	260	— 333
Rushden Urban	(i.)	101	229	330
„	..... (ii.)	43	9	52
				— 382
				—
Total visits ...		...	...	1551

One good effect of the employment of a Health Visitor, in the districts where she has been working, appears to have been that, when parents of babies are anxious for the Health Visitor to call, they have registered the births early, so that the information may be certain of reaching her quickly.

In judging as to whether the number of visits paid is satisfactory, it has to be remembered that the visits must necessarily be of unequal length according as help is required at the time or not. To illustrate this point, I have made a few selections from the Health Visitor’s Inquiry Note Books :—

1. "Stopped and put child in mustard bath, gave dose of castor oil and put on hot flannel with mustard in between; child appeared slightly convulsed, or had acute colic pains; oldest daughter had filled baby's bottle with cold water during absence of grandmother; told mother to see doctor as soon as possible; called again in two hours, also next morning."

This child recovered and is doing well.

2. "Called at chemists for cotton wool and camphorated oil and put on baby for the mother, who has only one finger on right hand, and told her to see a doctor."
3. "Mother in bed with bad bilious attack, so stayed to wash and dress baby."
4. "Mother sent for me 8.30 p.m. to look at baby; found child very feverish with bronchitis; rubbed well with camphorated oil and turpentine; put on flannel."
5. "Stopped to attend to eye, also wash and dress baby; mother not so well, unable to get up, alone in house."
6. After Influenza: "Found the mother still very feeble, is about again; stayed to give helping hand."

These few instances will serve to show that the visits of the Health Visitor are not mere matters of a few minutes each, but that they are long enough to be of practical utility should occasion require. I am informed by the Health

Visitor that her visits have varied in point of time from a quarter-of-an-hour to two hours, according to circumstances.

In brief comment on the figures shown in Table A, I would point out that 9.1 per cent. of the infants were weakly at birth ; that 13.6 per cent. of the infants had cotton instead of woollen clothing next their skin ; that improper feeding was going on in regard to 40 per cent. of the infants ; that where infants were bottle fed the long tubed bottle was in use in 53 per cent. of the cases, and that medical aid was sought only when specially urged in 33 instances. These facts must speak for themselves as against the opinion of those who believe that the visitation of mothers among the artisan classes is unnecessary, on the ground that the maternal instinct is present and that women intuitively know what to do. These figures go to prove, at any rate, that no small portions of that instinct and that knowledge are dormant at the present time. The need of education in the duties of maternity is certainly apparent, and I shall be glad when the teaching of hygiene in the elementary schools can be made the basis of early instruction to young mothers. At the present time that basis does not exist.

I am satisfied myself that the work, which has been done so far, has been excellent and exceedingly valuable ; but I think it better to put before the Committee a letter which the Health Visitor has addressed to me on certain points as to which I had a desire to be informed, and I am glad to find that the gratifying feature, which has been noted in other counties where Health Visitors are employed, of young married women beginning to find out for themselves the value of the information afforded them, has been equally manifested in the Wellingborough, Finedon, and Rushden Urban Districts. The letter is as follows :—

“ Sir,—I am sure that you will be glad to learn that the inmates of the majority of houses that I have visited do not resent my calling, especially now that they are beginning to understand that it is not because of absolute neglect, or fear of such, that I am calling. In many cases the people thoroughly appreciate the work of the Health Visitor, and many have said there ought to have been one round before. One does find a lot of ignorance amongst the mothers regarding their babies’ comfort, even in homes where you would expect to find them different. I suppose it is due to their own home training, and remaining in the workshop or factory until married. Many of the mothers, who are at all interested, will often question me on different points, and are anxious to learn all they can, and many are often surprised at the simple things that can be done or given to relieve and comfort baby, and, now that they are expecting me to call, they will not give things to their little ones, which friends or neighbours have advised, until asking me first if it is good for them. It will, I feel sure, make a big difference to the Infant Mortality when interfering people do not persuade the young mothers to do so many absurd things ; I find that an obstacle not easily overcome. Most of the mothers with a first baby are truly glad of my visit, and are anxious to do what is right, and amongst such I think a lot of good can be done. I often find that they will tell one another what I have said, and will advise others to try to do likewise.

Regarding the mother’s own health and comfort, one can often give a word of advice ; so many do not think of taking suitable food to help nourish baby, and the majority are afraid of cold water, green vegetables, and fruit, and to give baby water is to them almost a crime, as also is allowing baby to sleep in the cradle alone at night, and allowing them to have plenty of fresh air. Many were afraid to put a baby out of

doors to sleep, thinking it would take a chill, but I am glad to say that difficulty is now nearly overcome.

I think, Sir, that you will see by my notes from time to time that I have been of real use to a few, and, in some cases where mothers have seen their little ones relieved and doing better, they have asked me if there was anything to pay for my services, and thought how kind it was and how good for the people to have such as me going round ; of course, in many cases much tact and discretion has had to be used."

(B.)

On occasion, and as the circumstances of her visitation of infants have permitted, the Health Visitor has done some house to house inspection of certain areas at the request of the Medical Officers of Health in the Wellingborough and Finedon Urban Districts. This work was independent of, and separate from, the inspection of the homes of infants. In regard to the latter, the inspection of the home of an infant, and advice, and assistance as to its cleanliness are matters of routine ; but the conditions of certain homes were referred to local health officials for remedial measures in nine cases in the Wellingborough Urban District, five cases in the Finedon Urban District, and two cases in the Rushden Urban District.

In respect of the particular work of house to house inspection, an area of 170 houses was referred to the Health Visitor in the Wellingborough Urban District ; of these houses, 127 were inspected, the remaining 43 being found empty or shut up at the time of inspection. The 127 houses contained 505 rooms, and a population of 503 persons, of whom 50 were under school age, 125 were school children, and 328 were above school age. Similarly, in the Finedon Urban District, out of an area of 136 houses, 121 were inspected, and 15 were

found empty or shut. The 121 houses contained 534 rooms and had a population of 621 persons, of whom 62 were under school age, 199 were school children, and 360 were above school age. The average number of persons in each house of the Wellingborough area was 4, as against 4.7 for the whole district at the census of 1901, and correspondingly, the figures were 5.1 as against 4.8 for the Finedon area and district.

In the Wellingborough and Finedon areas there were :—

Wellingborough area.				Finedon area.			
7 houses containing 2 rooms.				1 house containing 2 rooms.			
19	„	„	3	12 houses	„	3	„
76	„	„	4	64	„	4	„
21	„	„	5	26	„	5	„
3	„	„	6	16	„	6	„
1 house	„	7	„	2	„	7	„

TABLE C.

Summarising the house to house inspection work of the Health Visitor in

	Wellingborough. Finedon. Total.		
TENANTS URGED TO—			
Open windows	19	19	38
Empty slops	12	12	24
Clean rooms	24	20	44
Unstop chimneys	27	34	61
Bathe children	—	1	1
Clean bedding	—	2	2

DEFECTIVE CONDITIONS REFERRED TO

SANITARY INSPECTOR :—

Cleansing of house required.....	7	5	12
Choked closet.....	—	3	3
Damp rooms	3	1	4
Defective closet	9	5	14

	Wellingborough.	Finedon.	Total.
Defective roof or ceiling	3	2	5
„ staircase	4	—	4
„ flooring	1	—	1
„ drains	3	2	5
„ yard paving	1	—	1
Dilapidated house	12	1	13
Overcrowding	5	3	8

CASES OF SICKNESS IN WHICH ASSISTANCE
AND ADVICE WERE GIVEN :—

Asthma	1	1	2
Broken limbs	—	2	2
Bronchitis	3	5	8
Cancer	2	—	2
Colds	2	2	4
Consumption	4	1	5
Diarrhœa (Infantile)	3	—	3
Eczema	—	3	3
Mental.....	2	—	2
Paralysis	1	1	2
Rheumatism	1	—	1
Spinal Curvature	1	—	1
Ulcerated legs	1	—	1
Whooping-cough	—	13	13

With regard to the foregoing figures, it is interesting to note that nearly 60 per cent. of the houses in the Wellingborough area were of four rooms only, of which two were bedrooms, and that the number of similar houses in the Finedon area was slightly over 52 per cent. So, too, the unstopping of chimneys was found necessary, in 21 per cent. of the houses in the Wellingborough area, and in 28 per cent. in the Finedon area, while the need for urging the opening of windows

occurred in about 15 per cent. of the houses in the Wellingborough area, and 15.7 per cent. in the Finedon area. Thus, advice in matters of ventilation appeared to be necessary in fully 36 per cent. of the houses in the Wellingborough area, and in nearly 44 per cent. of the houses in the Finedon area.

As to larger matters of sanitary import, which were referred by the Health Visitor to the local Sanitary Inspectors, there were 48 instances in the Wellingborough area and 22 in the Finedon area.

In respect of the cases of sickness which the Health Visitor found in the houses which she visited, there was nothing of special moment, with the exception that whooping-cough was prevalent at the time in the Finedon Urban District ; but her records show that in several instances she was able to give timely advice and assistance with them.

I think that this house to house inspection work has been extremely useful, but I do not think that much more can be done in this direction by the Health Visitor at present, owing to the increasing number of infants coming on to her books from the three Urban Districts of Wellingborough, Finedon, and Rushden, and to the necessity of her continuing to visit those already on them who have not reached yet the age of one year. The value of such house to house inspection work, however, is shewn, I think, sufficiently in the foregoing figures, and is indicative of what may be done through the agency of Health Visitors working in harmony with the local health authorities.

CHARLES E. PAGET,

County Medical Officer of Health.

MEDICAL INSPECTION OF SCHOOL CHILDREN.

TOTALS. SPECIAL CASES (BOYS AND GIRLS).
UNDER 5 YEARS OF AGE.

Schools.	No. Examined.	Enlarged Tonsils.	External Eye Disease.	Defective Vision.	Ear Disease.	Deaf and Dumb.	Mentally Defective.	Rickets.	Infectious or Contagious Disease.	Vermineous Head.	No defect found.
Boys	7		1		1	1	1		3		
Girls	7	1	2	2				1		1	1
TOTALS	14	1	3	2	1	1	1	1	3	1	1

The difference in the number in the column "No. Examined" and the total number of those under the respective causes is accounted for by the fact that one child was suffering from two of the defects mentioned above, viz.:—
External Eye Disease, and Defective Vision.

MEDICAL INSPECTION OF SCHOOL CHILDREN.

TOTALS. SPECIAL CASES (BOYS AND GIRLS).

Schools.	No. Examined.	Aged 5-10 or over 10	Coryza.	Enlarged Tonsils.	External Eye Disease.	Defective Vision.	Ear Disease.	Defective Hearing.	Deaf and Dumb.	Defective Speech.	Mental Condition.		Weak Heart.	Consumption.	Rickets.	Deformities, Spinal Disease, etc.	Ununited Fractured Collarbone.	Incontinence of Urine.	Anæmia.	Bright's Disease.	Epilepsy.	Fits.	Debility.	Infectious or Contagious Disease.	Imbecility.	Bronchitis.	Chorea.	Other minor ailments or defects.	No defect found
											Below Average.	Mentally Defective.																	
Boys	84	5—10 over 10	1	4 1	1 2	1 4	4 2	1 5		6 4	5 2	21 4		*1	1	5 1	1 1	1	1 1			1		3 1				1 3	1 3
Girls	84	5—10 over 10		7 3	4 2	9 3	4 4	4 5	1	2 1	4 1	5 5	1 2		2	1 3			2		2 1	2		2	1	1	1		7 2
TOTALS	168	5—10 over 10	1	11 4	5 4	10 7	8 6	5 10	1	8 5	9 3	26 9	1 2	1	3	6 4	1 1	1	3 1	1 1	2 1	2 1	1	5 1	1 1	1	1	1 3	8 5

* Doubtful case.

The difference in the number in the column "No. Examined" and the total number of those under the respective causes is accounted for by the fact that several of the children examined have been found to be suffering from two or more of the defects mentioned above.



APPENDIX II.

Table A.

MEDICAL INSPECTION OF SCHOOL CHILDREN.

In respect of Columns "Age" and "No. Examined," certain of the children were not examined, viz.:—

- 5, 5 for Height, 6 for Weight.
- 5 — 6, 47 „ „ , 51 „ „
- 12 —13, 14 „ „ , 14 „ „
- 13 —14, 25 „ „ , 27 „ „
- 14 —15, 3 „ „ , 3 „ „

TOTALS. (BOYS AND GIRLS COMBINED).

Age.	No. Examined.	Sum of Heights.	Average Height.		Sum of Weights.	Average Weight.		Nutrition.			Cleanliness and Condition of Skin.					
		English (inches).	English (inches)	Metric (centimetres).	English (lbs.)	English (lbs.)	Metric (kilos).	Average.	Moderate.	Bad.	Head			Body.		
											Average.	Moderate.	Bad.	Average.	Moderate.	Bad.
— 5	31	1,035	39 $\frac{3}{4}$	100·9	918 $\frac{1}{2}$	36 $\frac{3}{4}$	16·7	26	5		29	2		26	5	
5 — 6	482	18,032 $\frac{1}{2}$	41 $\frac{1}{4}$	104·8	17,212 $\frac{1}{2}$	39 $\frac{3}{4}$	18·0	395	76	11	420	51	11	433	38	11
12 — 13	40	1,461 $\frac{1}{2}$	56	142·2	1,965	75 $\frac{1}{2}$	34·2	31	7	2	38	1	1	36	3	1
13 — 14	151	7,265	57 $\frac{1}{2}$	146·0	10,117 $\frac{1}{2}$	81 $\frac{1}{2}$	36·9	120	28	3	133	16	2	138	10	3
14 — 15	7	238 $\frac{1}{2}$	59 $\frac{1}{2}$	151·1	370	92 $\frac{1}{2}$	42·0	7			7			7		
Totals and Means..	711	28,032 $\frac{1}{2}$	45 $\frac{1}{4}$	114·9	30,583 $\frac{1}{2}$	50	22·7	579	116	16	627	70	14	640	56	15



APPENDIX II.

Table B.

MEDICAL INSPECTION OF SCHOOL CHILDREN.

TOTALS. BOYS AND GIRLS (COMBINED).

Age.	No. Examined.	Teeth.														Nose and Throat.										External Eye Disease.	Ear Disease.	Hearing.			Speech.			Mental Condition	
		Clean.	Moderate.	Dirty.	Caries.								Irregular.	Enamel Defective.	Nose.		Throat.	Tonsils.		Adenoids.		Submax. and Cervical Glands.			Normal.			Moderate.	Bad.	Normal.	Indistinct.	Very Indistinct.	Below Average.	Feeble-minded or Mentally Defective.	
					0	1	2	3	4	5	6	Over 6			Not Examined.	Coryza.		Chronic Coryza.	Slightly Enlarged.	Much Enlarged	Slightly Enlarged.	Much Enlarged.	Slightly Enlarged.	Much Enlarged.											Palpable.
— 5	31	18	12	1	11	3	5	2	5	1	2	1	1		2			*1	1	1			3			2	2	31			19	12			
5 — 6	482	336	123	23	169	50	60	57	51	27	17	33	18	1	16	9	3	*†2	52	26	27	20	8	2	15	20	11	470	9	3	371	99	12	17	8
12 — 13	40	28	11	1	14	4	11	6	2			1	2	5	1				3	1	4				1	5	1	38	1	1	40				
13 — 14	151	94	53	4	49	21	34	20	7	7	7	2	4	8	1		1		10	8	10	4	1		2	2	1	146	5		145	2	4	3	2
14 — 15	7	6	1		1		3		2				1															7			7				
TOTALS ..	711	482	200	29	244	78	113	85	67	35	26	37	26	14	20	9	4	3	66	36	41	24	12	2	18	29	15	692	15	4	582	113	16	20	10

* Injected.

† Slightly Enlarged



MEDICAL INSPECTION OF SCHOOL CHILDREN.

TOTALS. BOYS AND GIRLS (COMBINED).

Age.	Defective Vision.														
	Combined.					Right.					Left.				
	Fair Vision.	Weak Vision.	Bad Vision.	Blind.	Not Examined.	Fair Vision.	Weak Vision.	Bad Vision.	Blind.	Not Examined.	Fair Vision.	Weak Vision.	Bad Vision.	Blind.	Not Examined.
12 — 13	35				5	34	1			5	33	1	1		5
13 — 14	136	6			9	130	8	2	1	10	127	10	2	2	10
14 -- 15	6				1	6				1	6				1
TOTALS ...	177	6			15	170	9	2	1	16	166	11	3	2	16



APPENDIX II.

Table C.

MEDICAL INSPECTION OF SCHOOL CHILDREN.

TOTALS. BOYS AND GIRLS (COMBINED).

Age.	Heart and Circulation		Lungs.		Nervous System.		Rickets.	Deformities, Spinal Disease, &c	Infectious or Contagious Disease.					Other Diseases or Defects.	Totals.
	Below Average.	Bad.	Below Average.	Bad.	Below Average.	Bad.			Scarlet Fever.	Impetigo.	Ringworm.	Whooping Cough.	Chicken Pox.		
-- 5			1					1		2				1	5
5 -- 6	2	3	3	5	1		7	14	1	6	7	1	1	22	73
12 -- 13					1			3		2					6
13 -- 14	5		1	1	1			4						6	18
TOTALS ..	7	3	5	6	3		7	22	1	10	7	1	1	29	102



Appendix II.

Medical Inspection of School Children.

PERSONAL HISTORY.

TABLE D.

(a) PREVIOUS HISTORY OF CHILDREN BEFORE ADMISSION TO SCHOOL.

Schools.	Measles.	Whooping Cough.	Chicken Pox.	Scarlet Fever.	Diphtheria.	Other Illnesses.
Boys ...	188	125	46	29	2	50
Girls ...	195	144	61	30	4	34
TOTALS ...	383	269	107	59	6	84

(b) EXCEPTIONAL FAMILY HISTORY.

Schools.	Cases of or Deaths from Phthisis in Family.	Cases of Insanity, &c., in Family.
Boys ...	3	5
Girls ...	6	1
TOTALS ...	9	6

(c) CLOTHING AND FOOTGEAR OF CHILDREN.

Schools.	Clothing			Footgear.		
	Good.	Average.	Bad.	Good.	Average.	Bad.
Boys ...	333	38	6	327	38	12
Girls ...	301	29	4	296	29	9
TOTALS ...	634	67	10	623	67	21

(d) ATTENDANCE.

Schools.	Irregularity of Attendance.
Boys ...	22
Girls ...	34
TOTALS ..	56



APPENDIX III.

Northamptonshire County Council.

*School
Medical
Officer.*

County Education Offices,
NORTHAMPTON,
190

Dear Sir,

Non-Notifiable Diseases.

Parish, or Urban District
Name of School
(Department)

During my inspection at the above School, I found that
.....was (a) very
prevalent, (b) prevalent or † (c) recognisable in.....cases
among the children attending.

Yours faithfully,
H. L. P. HULBERT,
School Medical Officer.

The County Medical Officer of Health,
County Hall,
NORTHAMPTON.

†Names and Addresses of Children Affected.

.....
.....
.....
.....
.....
.....



VITAL STATISTICS DURING 1908.

Table 1.

DISTRICTS. 1	Population estimated to middle of 1908. 2	Births.		Total Deaths Registered in the Districts.				Total Deaths in Public Institutions in the Districts. 9	Deaths of Non- Residents regis- tered in Public Institutions in the Districts. 10	Deaths of Residents regis- tered in Public In- stitutions beyond the Districts. 11	Nett Deaths at all Ages belonging to the District.		Area of Districts in Acres. 14	At Census of 1901.			
		Number. 3	Rate.* 4	Under 1 Year of Age.		At all Ages.					Number. 12	Rate.* 13		Total Population at all Ages. 15	No. of Inhabited Houses. 16	Average No. of Persons per House. 17	
				Number. 5	Rate per 1000 Births Registered. 6	Number. 7	Rate.* 8										
URBAN :—																	
BRACKLEY (BOROUGH)	2,467	46	18.6	4	86.9	30	12.1	6	5	3	28	11.3	3,489	2,467	548	4.5	
DAVENTRY (BOROUGH)	3,780	64	16.9	8	125.0	60	15.8	19	14	1	47	12.4	3,633	3,780	869	4.3	
HIGHAM FERRERS (BOROUGH) ...	2,920	63	21.5	2	31.7	27	9.2			2	29	9.0	1,945	2,540	555	4.5	
DESBOROUGH	4,120	122	29.6	12	98.3	61	14.8			1	62	15.0	2,400	3,573	748	4.7	
FINEDON	4,040	87	21.5	15	172.4	40	9.9			1	41	10.1	3,661	4,129	853	4.8	
IRTHLINGBOROUGH	4,670	122	26.1	9	73.7	45	9.6			3	48	10.2	3,722	4,314	896	4.8	
KETTERING	31,338	666	21.2	75	112.7	357	11.3	62	20	6	343	10.9	2,814	28,653	5,659	5.0	
OUNDLE	2,404	37	15.3	2	54.0	44	18.3	17	15		29	12.0	2,228	2,404	512	4.7	
RAUNDS	4,320	120	27.7	13	108.3	52	12.0				52	12.0	4,460	3,811	832	4.5	
ROTHWELL	5,050	99	19.6	16	161.6	53	10.4				53	10.4	3,638	4,193	902	4.6	
RUSHDEN	15,192	310	20.4	35	112.9	122	8.0				122	8.0	3,777	12,453	2,492	5.0	
WELLINGBOROUGH	21,000	414	19.7	43	103.8	258	12.2	55	30	9	237	11.2	4,265	18,412	3,873	4.7	
Total and Means for Combined URBAN DISTRICTS.	101,301	2,150	21.22	234	108.83	1,149	11.34	159					40,032	90,729	18,739	4.8	
RURAL :—																	
BRACKLEY	7,181	135	18.7	14	103.7	97	13.5			7	104	14.4	42,440	7,182	1,818	3.9	
BRIXWORTH	11,820	248	20.9	18	72.5	164	13.8	17	11	4	157	13.2	63,647	11,829	2,876	4.1	
CRICK	2,240	53	23.6	3	56.6	32	14.2			1	33	14.7	18,547	2,284	601	3.8	
DAVENTRY	13,425	320	23.8	24	75.0	161	11.9			12	173	12.8	60,877	13,425	3,275	4.0	
EASTON-ON-THE-HILL	1,462	34	23.2	4	117.6	30	20.5				30	20.5	6,341	1,462	353	4.1	
GRETTON	1,476	30	20.3	Nil	Nil	18	12.1			4	22	14.9	12,310	1,563	372	4.2	
HARDINGSTONE	7,846	150	19.1	18	120.0	104	13.2	5		3	107	13.6	32,542	7,846	1,889	4.1	
KETTERING	13,000	300	23.0	23	76.6	137	10.5			13	150	11.5	49,337	11,674	2,623	4.4	
MIDDLETON CHENEY	2,414	55	22.7	4	72.7	32	13.2			2	34	14.0	13,888	2,414	626	3.8	
NORTHAMPTON	6,360	133	†24.8	11	82.7	167	26.2	91	90		77	†14.4	16,228	6,420	1,290	†4.2	
OUNDLE	6,166	169	27.4	15	88.7	84	13.6			7	91	14.7	58,677	6,859	1,727	3.9	
OXENDON	4,202	91	21.6	2	21.9	53	12.6			5	58	13.8	34,491	4,202	1,084	3.8	
POTTERS PURY	4,987	128	25.6	9	70.3	99	19.8	13	3	2	98	19.6	19,914	5,372	1,282	4.1	
THRAPSTON	9,997	249	24.9	18	72.2	129	12.9	16	5		124	12.4	36,836	10,348	2,453	4.2	
TOWCESTER	9,971	228	22.8	18	78.9	150	15.0	9		2	152	15.2	42,457	10,720	2,633	4.0	
WELLINGBOROUGH	13,917	282	20.2	39	138.2	143	10.2			5	148	10.6	33,115	13,156	3,033	4.3	
Totals and Means for Combined RURAL DISTRICTS.	116,464	2,605	22.36	220	84.45	1,600	13.73	151					541,647	116,756	27,935	†4.1	
Totals and Means for ADMINIS- TRATIVE COUNTY.	217,765	4,755	21.83	454	95.47	2,749	12.52	310	†42		2,707	12.43	581,579	207,435	43,674	†4.4	

* Rates in Columns 4, 8, and 13 calculated per 1,000 of estimated population.
† Berry Wood Asylum population excluded for purposes of this calculation.
‡ Deaths in Berry Wood Asylum situate in Northampton Rural District, and in Northampton County Borough Isolation Hospitals situate in Brixworth Rural District, of persons not belonging to the Administrative County.
NOTE.—The deaths included in Column 7 of this Table are the whole of those registered during the year as having actually occurred within the Districts. The deaths included in Column 12 are the number in Column 7, corrected by the subtraction of the number in Column 10, and the addition of the number in Column 11.
By the term "Non-Residents" is meant persons brought into the District on account of sickness or infirmity, and dying in public institutions there, and by the term "Residents" is meant persons who have been taken out of the District on account of sickness or infirmity, and have died in public institutions elsewhere.
The "Public Institutions" taken into account for the purposes of this Table are those into which persons are habitually received on account of sickness or infirmity, such as hospitals, workhouses, and lunatic asylums.

CAUSES OF, AND AGES AT, DEATH DURING THE YEAR 1908.

Table II.

URBAN DISTRICTS.	Deaths at								Aged under 5 or over 5	Deaths from																																	
	All Ages	Under 1 year	1 and under 5	5 and under 15	15 and under 25	25 and under 65	65 and up-wards	Small Pox.		Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria and Membranous Croup.	Croup.	Fever.			Epidemic Influenza.	Cholera.	Plague.	Diarrhoea.	Enteritis.	Puerperal Fever.	Erysipelas.	Phthisis.	Other Tuberculous Diseases.	Cancer, Malignant Disease.	Bronchitis.	Pneumonia.	Pleurisy.	Other Diseases of Respiratory Organs.	Alcoholism, Cirrhosis of Liver.	Venereal Diseases.	Premature Birth.	Diseases & Accidents of Parturition.	Heart Diseases.	Accidents.	Suicides.	All other causes.	All Causes.			
															Typhus.	Enteric.	Other Continued.																										
BRACKLEY (BOROUGH)	28	4	1		1	12	10	Under 5 5 upwds.									1								2	2	1	1				1		1	4	2	1	9	5	23			
DAVENTRY (BOROUGH)	47	8	2	1	1	9	26	Under 5 5 upwds.				1					3								3	1	4	3	1		1		2		5	1	1	15	5	10	37		
HIGHAM FERRERS (BOROUGH) ...	29	2	3	3	2	8	11	Under 5 5 upwds.																	2		5	2	1	2		1		1	4		1		3	5	24		
DESBOROUGH	62	12	15	2	4	15	14	Under 5 5 upwds.			1	4		1			3								4	2	4		3	1		2		5	1	2		12	12	27	35		
FINEDON	41	15	3	3	1	13	6	Under 5 5 upwds.											1						3		2	5	2	4		1		1		3		2	8	8	18	23	
IRTHLINGBOROUGH	48	9	3	4	3	18	11	Under 5 5 upwds.			2										1				4	1	5	3	1	1		3		5	2	1		5	12	12	36		
KETTERING	343	75	27	9	20	124	88	Under 5 5 upwds.		10	2	14	1			4	4			3	4		1	1	3	2	26	2	14	13		1		23		1	32	7	5	25	81	102	241
OUNDLE	29	2	1	1	2	5	18	Under 5 5 upwds.					1												1	1	6		1			2		1	8				8	3	26		
RAUNDS	52	13	8	3	7	12	9	Under 5 5 upwds.				1		4		1									8	1	2	3	2	1		1		3		3		4		5	11	21	31
ROTHWELL	53	16	2	6	1	11	17	Under 5 5 upwds.				3					1							1	6	2	3	1	2						1	5	1		9	13	18	35	
RUSHDEN	122	35	15	7	9	27	29	Under 5 5 upwds.				13	2				4					2			1	5	8	8	7	3		13		1	8		1	2	1	9	20	50	72
WELLINGBOROUGH	237	43	10	4	11	82	87	Under 5 5 upwds.				10					5			2	1				20	1	13	3	3				11		25	2	3	1	21	91	53	184	
Totals for Combined Urban Districts	1,091	234	90	43	62	336	326	Under 5 5 upwds.		10	1	45	4	5		5	21			6	7		2	1	2	4	11	26	25	1	2		62		3	8		103		324	767		

NOTE.—So far as the information is obtainable, all deaths of “ Residents ” occurring in public institutions, either within or without the districts, including Berry Wood Asylum, are included in this Table, and deaths of “ Non-Residents ” occurring in public institutions in the districts are excluded.
See Note on Table I. as to meaning of “ Residents ” and “ Non-Residents.”



CAUSES OF, AND AGES AT, DEATH DURING THE YEAR 1908.

Table II.

RURAL DISTRICTS.	Deaths at								Aged under 5 or over 5.	Deaths from.																																		
	All Ages	Under 1 year	1 and under 5	5 and under 15	15 and under 25	25 and under 65	65 and up-wards	Small Pox.		Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria and Membranous Croup.	Croup.	Fever.			Epidemic Influenza.	Cholera.	Plague.	Diarrhoea.	Enteritis.	Puerperal Fever.	Erysipelas.	Phthisis.	Other Tuberculous Diseases.	Cancer, Malignant Disease.	Bronchitis.	Pneumonia.	Pleurisy.	Other Diseases of Respiratory Organs.	Alcoholism, Cirrhosis of Liver.	Venereal Diseases.	Premature Birth.	Diseases & Accidents of Parturition.	Heart Diseases.	Accidents.	Suicides.	All other Causes.	All Causes.				
															Typhus.	Enteric.	Other Continued.																											
BRACKLEY	104	14	6	4	4	36	40	Under 5 5 upwds.													1	2				6	1	1	2	3			1		4		20	3		3	20			
† BRIXWORTH	157	18	12	4	3	40	80	Under 5 5 upwds.				3						2				2				11	1	15	7	4			1		4		18	1	2	9	30			
CRICK	33	3	2		1	10	17	Under 5 5 upwds.									1											3	1	2			1		1	1			16		5			
DAVENTRY	173	24	9	6	3	56	75	Under 5 5 upwds.				3	1			1		6			1	1	1			8	1	3	16	10	4	1		2		4		13	5	1	17	33		
EASTON-ON-THE-HILL	30	4			2	13	11	Under 5 5 upwds.									3									2	1	5	2	2	1					1			1	4				
GRETTON	22				1	3	18	Under 5 5 upwds.									1					1				1		2	2	2					3				10	22				
HARDINGSTONE	107	18	8	2	7	28	44	Under 5 5 upwds.				3	2			1					1	1				10	1	8	3	5	1	1		1		8	1	10	2	2	3	26		
KETTERING	150	24	7	3	4	39	73	Under 5 5 upwds.										4			1					11	3	1	14	8	6	1			7		1	19	2	4	14	31		
MIDDLETON CHENEY	34	4		2	1	11	16	Under 5 5 upwds.				1	1									1				2		6	1	2	2					6			1	11	4			
* NORTHAMPTON	77	11	5		1	24	36	Under 5 5 upwds.				5					1				4		1			5	2	7	1	5			1		4	2	6	4	1	28	16			
OUNDLE	91	15	6	1	5	21	43	Under 5 5 upwds.				2									1	1				7	1	9	4	2				5		1	13	4	2	5	21			
OXENDON	58	2	3	6	1	16	30	Under 5 5 upwds.					2	1								1				4		5	5	1	10			1			9	1		1	5			
POTTERSPURY	98	9	3	5	6	24	51	Under 5 5 upwds.					1				1	3			1					7	3	4	2	3				4		1	12	4	1	4	12			
THRAPSTON	124	18	3	7	5	32	59	Under 5 5 upwds.				1	5			1		3								5	5	2	20	6	1			2			19	1		6	21			
TOWCESTER	152	18	12	10	2	35	75	Under 5 5 upwds.				4	5									2	1			5	1	10	5	6	2		1		7			20	6	4	9	30		
WELLINGBOROUGH	148	39	7	3	6	36	57	Under 5 5 upwds.				6				1		2			1					13	2	3	10	15	10	4			7		1	18	1	2	14	46		
Totals for Combined Rural Districts	1,558	221	83	53	52	424	725	Under 5 5 upwds.				28	5			4		2			9	10	3		97	15	1	52	27		3	1	8		58	3	1	7		86	304			
																																									</			

† Deaths in Northampton County Borough Isolation Hospitals numbered 11, all of which were of Non-Residents of the Administrative County.

* Deaths in Berry Wood Asylum numbered 91, 31 of these being of Non-Residents of the Administrative County.

NOTE.—So far as the information is obtainable, all deaths of "Residents" occurring in public institutions, either within or without the districts, including Berry Wood Asylum, are included in this table, and deaths of "Non-Residents" occurring in public institutions in the districts are excluded.



Table III.

TABLE showing the deaths of persons belonging to the Administrative County of Northampton which occurred in BERRY WOOD ASYLUM during the year 1908. These have been allocated on Tables II. to the several Districts to which they belonged and are also included in the Nett deaths in Column 12 of Table I.

CAUSES OF DEATH,	Deaths at							Deaths in Localities.																											
	All Ages.	Under 1 year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.	URBAN.														RURAL.													
								Brackley Borough.	Daventry Borough.	Higham Ferrers Borough.	Desborough.	Finedon.	Irthlingborough.	Kettering.	Oundle.	Raunds.	Rothwell.	Rushden.	Wellingborough.	Brackley.	Brixworth.	Crick.	Daventry.	Easton-on-the-Hill.	Gretton.	Hardingstone.	Kettering.	Middleton Cheney.	Northampton.	Oundle.	Oxendon.	Potterspury.	Thrapston.	Towcester.	Wellingborough.
Epidemic Influenza	1						1	1																											
Phthisis (Pulmonary Tuberculosis) ...	11				1	9	1	1	1				1							1	1			1			2	1				1			1
Cancer, malignant disease	4					3	1												1	1		1	1												
Bronchitis	1						1																											1	
Pneumonia	3				1	1	1			1											2														
Other diseases of Respiratory Organs	1				1					1																									
Heart diseases	13			1		3	9					1	1						2	1			3			1					3				1
General Paralysis of Insane	2					2		1												1															
Other Cerebral Diseases	15				3	8	4				1			3					2	2	1							2	2						2
Kidney diseases	1					1																							1						
Senility	6						6							1					1	1	1							1				1			
All other causes	2					2													2																
All Causes	60			1	6	29	24	3	1	2	1	1	1	5					9	7	4	1	5				3	4	2	1		4	1		5

CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR 1908.

Table IV.

URBAN DISTRICTS.	AGES OF CASES NOTIFIED.							NUMBER AND CLASS OF CASES NOTIFIED.													NUMBER AND CLASS OF CASES REMOVED TO HOSPITAL.											
	At all ages.	Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 65.	65 and upwards.	Small Pox.	Cholera.	Diphtheria (including Membranous Croup).	Erysipelas.	Scarlet Fever.	Typhus Fever.	Enteric Fever.	Relapsing Fever.	Continued Fever.	Puerperal Fever.	Phthisis (voluntary).	Chicken Pox.	TOTALS.	Small Pox.	Cholera.	Diphtheria (including Membranous Croup).	Erysipelas.	Scarlet Fever.	Typhus Fever.	Enteric Fever.	Relapsing Fever.	Continued Fever.	Puerperal Fever.	TOTALS.	
BRACKLEY (BOROUGH)	2(a)										1	1								2												
DAVENTRY (BOROUGH)	9		3	2		4				1	2	4		2						9					1							4
HIGHAM FERRERS (BOROUGH) ...	Nil																															
DESBOROUGH	15		3	7	4	1						6		9						15												
FINEDON	11			7	3	1					1	10								11												
IRTHLINGBOROUGH	32		6	19	2	5					1	27		2			2			32												
KETTERING	251	1	54	130	37	26	3			9	32	190		18			2			251			4		95		14					113
OUNDLE	4		1	1		2				1	2	1								4												
RAUNDS	20		2	16		2					2	17		1						20												
ROTHWELL	20		7	9	2	2					3	17								20												
RUSHDEN	71		7	39	16	9				14	9	44		4						71												
WELLINGBOROUGH	121	1	28	67	10	9	6			3	16	101		1						121					25							25
Totals for Combined Urban Districts ...	556	2	111	297	74	61	9			28	69	418		37			4			556			4		124		14					142

(a) Ages not given.

CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR 1908.

Table IV.

RURAL DISTRICTS.	AGES OF CASES NOTIFIED.							NUMBER AND CLASS OF CASES NOTIFIED.												NUMBER AND CLASS OF CASES REMOVED TO HOSPITAL.												
	At all Ages.	Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 65.	65 and upwards.	Small Pox.	Cholera	Diphtheria (including Membranous Croup).	Erysipelas.	Scarlet Fever.	Typhus Fever.	Enteric Fever.	Relapsing Fever.	Continued Fever.	Puerperal Fever.	Phthisis (voluntary)	Chicken Pox.	TOTALS.	Small Pox.	Cholera.	Diphtheria (including Membranous Croup).	Erysipelas.	Scarlet Fever.	Typhus Fever.	Enteric Fever	Relapsing Fever.	Continued Fever	Puerperal Fever.	TOTALS.	
BRACKLEY	16(a)									1	2	13									16											
BRIXWORTH	44		7	17	7	13				2	14	28									44											
CRICK	2			1		1				1	1										2											
DAVENTRY	52		10	23	4	12	3			4	13	31		3			1				52			1		13						14
EASTON-ON-THE-HILL	4			3	1					4											4			3(e)								3
GRETTON	13		4	8		1						13									13											
HARDINGSTONE	42(a)									4	4	7		1					26		42			2(b)		5						7
KETTERING	98		13	58	21	6					9	86							3		98					50						50
MIDDLETON CHENEY	4+	1								1		3									4											
NORTHAMPTON	31(a)									3	4	23					1				31					1(d)						1
OUNDLE	11		3	4		3	1			4	2	5									11			2		2						4
OXENDON	11	1	5	5						9		2									11											
POTTERS PURY	59	1	11	30	7	10				12	6	36		5							59											
THRAPSTON	39		9	18	7	4	1			17	5	10		7							39			1(c)								1
TOWCESTER	29		1	18	2	8				14	5	7		1			2				29											
WELLINGBOROUGH	56	1	5	27	8	11	4			3	15	33		5							56											
Totals for Combined Rural Districts ...	511	4	68	212	57	69	9			79	80	297		22			4	3	26	511			9		71							80

† Ages of three of the cases not given.
(a) Ages not given.
(b) One case removed to Northampton General Hospital.

(c) Removed to Oundle Rural Isolation Hospital.
(d) Removed to Northampton C.B. Isolation Hospital in error.
(e) Removed to Stamford Infirmary.

DISTRICTS.	INSPECTION OF PREMISES.						NUISANCES UNDER THE PUBLIC HEALTH ACTS, INCLUDING THOSE SPECIFIED IN SECTIONS 2, 3, 7, AND 8 OF THE FACTORY ACT, AS REMEDIABLE UNDER THE PUBLIC HEALTH ACTS.							OFFENCES UNDER THE FACTORY AND WORKSHOP ACT.			MATTERS NOTIFIED TO H.M. INSPECTOR OF FACTORIES.				UNDERGROUND BAKEHOUSES (S. 101).			
	Number of Inspections.			Number of Written Notices.			Want of Cleanliness.	Want of Ventilation.	Overcrowding.	Want of Drainage of Floors.	Other Nuisances.	Sanitary Accommodation.			Illegal Occupation of Underground Bakehouse (S. 101).	Breach of special sanitary requirements for Bakehouses (SS. 97 to 100).	Other offences (excluding offences relating to outwork).	Failure to affix Abstract of the Factory and Workshop Act (S. 133).	Action taken in matters referred by H.M. Inspector or as remediable under the Public Health Acts, but not under the Factory and Workshop Act (S. 5).		Other.	Certificates granted during the year.	In use at the end of the year.	
	Factories (including Factory Laundries).	Workshops (including Workshop Laundries).	Workplaces (other than Out-workers' premises).	Factories (including Factory Laundries).	Workshops (including Workshop Laundries).	Workplaces (other than Out-workers' premises).						Insufficient.	Unsuitable or Defective.	Not separate for sexes.					Notified by H.M. Inspector.	Report of action taken sent to H.M. Inspector.				
URBAN :—																								
BRACKLEY (BOROUGH)		13																						
DAVENTRY (BOROUGH)		46	4																					
HIGHAM FERRERS (BOROUGH) ...	12	12	2	6	8	12		1	3		20	2												
DESBOROUGH	18	28		8	11		11	5			5		2											
FINEDON	36	48					2																	
IRTHLINGBOROUGH	49	37	31	9	13	3	10				6		1	1			*2			2		2		
KETTERING	100	153					2		2		69	3	9	1				13						1
OUNDLE		16																						
RAUNDS	60		223	6		12	2		4					2										
ROTHWELL		30										1												
RUSHDEN	63	113	2	5	2		20		1		49	4		2†		11		7	2	2				
WELLINGBOROUGH	60	260	22	6	30	3	32		1	2		9	4	3		12		2		9				2
Combined URBAN DISTRICTS ...	398	756	284	40	64	30	79	6	11	2	149	19	16	9		25		22	4	11	2			3
RURAL :—																								
BRACKLEY		2																						
BRIXWORTH	1	2																						
CRICK		26			12																			
DAVENTRY		16																						
EASTON-ON-THE-HILL		10																						
GRETTON	6	12					3				1													
HARDINGSTONE	30	50					2																	
KETTERING	17	25	24			2	2						1						2	2				
MIDDLETON CHENEY																								
NORTHAMPTON	12	600		1	2		6				2													
OUNDLE	4	4					1																	
OXENDON																								
POTTERS PURY	3																							1
THRAPSTON	42	66	34				6			1	14		1											
TOWCESTER		92														1								
WELLINGBOROUGH	74	104	68	9	13	11	17				11	3	4			†5		3	2	2				
Combined RURAL DISTRICTS ...	189	1,009	126	10	27	13	37			1	28	3	6			6		3	4	4				1
ADMINISTRATIVE COUNTY ...	587	1,765	410	50	91	43	116	6	11	3	177	22	22	9		31		25	8	15	2			4

* Referred to H.M. Inspector. † Two referred to H.M. Inspector. ‡ One not remedied.

The following Districts have not yet adopted Section 22 of the Public Health Acts Amendment Act, 1890 :—

Finedon Urban.
Oundle Urban.
Rothwell Urban.
Brackley Rural.
Crick Rural.

Easton-on-the-Hill Rural.
Gretton Rural.
Middleton Cheney Rural.
Oundle Rural.
Oxendon Rural.

Potterspury Rural.
Thrapston Rural.
Towcester Rural.
Wellingborough Rural.

HOME WORK.

DISTRICTS	OUTWORKERS' LISTS, SECTION 107.											Number of Inspections of Outworkers' Premises.	OUTWORK IN UNWHOLESOME PREMISES, SECTION 108.			OUTWORK IN INFECTED PREMISES, SECTIONS 109, 110.		
	Lists received from Employers.						Numbers of Addresses of Outworkers received from other Councils.	Numbers of Addresses of Outworkers forwarded to other Councils.	Notices served on Occupiers as to keeping or sending Lists.	Prosecutions.			Instances.	Notice served.	Prosecutions.	Instances.	Orders made.	Prosecutions (Sections 109, 110).
	Twice in the year.			Once in the year.						Failing to keep or permit inspection of Lists.	Failing to send Lists.							
	Lists.	Outworkers. Con-tractors.	Work-men.	Lists.	Outworkers. Con-tractors.	Work-men.												
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
URBAN—																		
BRACKLEY (BOROUGH)																		
DAVENTRY (BOROUGH)	6		142					8				112						
HIGHAM FERRERS (BOROUGH)...	10		30				2	3				4						
DESBOROUGH	16		410				3		4			156	12	14		1	1	
FINEDON	42		180				10					180						
IRTHLINGBOROUGH	8	8	48	4	5	21	4	4				48						
KETTERING	54	58	815	13	4	96	1	180				436	9					
OUNDLE																		
RAUNDS	11		1,401				87	410				90	1					
ROTHWELL	8		162				1	1										
RUSHDEN	60	2	968	8		41	21	205				657	4	4		2		
WELLINGBOROUGH	18		277				15	50				160	2	2				
Combined URBAN DISTRICTS ...	233	68	4,433	25	9	158	144	861	4			1,843	28	20		3	1	
RURAL—																		
BRACKLEY																		
BRIXWORTH																		
CRICK																		
DAVENTRY... ..	16	8	342	2	2	7	9		2			123						
EASTON-ON-THE-HILL																		
GRETTON	2		36				2											
HARDINGSTONE	2		84				11	6										
KETTERING	22	11					5					215					11	
MIDDLETON CHENEY																		
NORTHAMPTON							2					144		5				
OUNDLE																		
OXENDON	144						4	2				77						
POTTERS PURY																		
THRAPSTON	6	6	6				4					117						
TOWCESTER	2		8	5	38	28	6					74						
WELLINGBOROUGH	15	50	1,716	7	10	134	79	19	20			208	5	5				
Combined RURAL DISTRICTS ...	209	75	2,192	14	50	169	122	27	22			958	5	10			11	
ADMINISTRATIVE COUNTY ...	442	143	6,625	39	59	327	266	888	26			2,801	33	30		3	12	

The whole of the Outworkers given above, with the exception of four at Kettering engaged in brush-making, and twenty at Wellingborough—ten engaged in basket-making, and a like number at box and paper bag making—were in respect of the making, &c., of wearing apparel, principally boots and shoes; there were, however, a good number engaged in corset-making, etc., at Desborough, and several in various districts engaged in dressmaking.

Table showing the Important and other classes of Workshops in the Districts.

DISTRICTS.	NUMBER AND CLASS OF WORKSHOPS.																			Total Number of Workshops.	
	Bakehouses.	Slaughter- houses.	Mineral Water Works.	Curriers.	Saddlers.	Boot and Shoe Trade.	Dress- making, Tailoring, and Millinery	Cabinet Makers, Joiners, and Builders.	Wheel- wrights, Coach- builders, and Blacksmiths.	Motor Works, Bicycle Works, &c.	Brickyards.	Tinsmiths.	Quarry.	Iron and Engineering Works.	Box Making.	Brush Making.	Leather Manufacture.	Printers.	Distillers.		
URBAN :—																					
BRACKLEY (BOROUGH)																			13	13	
DAVENTRY (BOROUGH)	6																		20	26	
HIGHAM FERRERS (BOROUGH)																			12	12	
DESBOROUGH	6	3																	15	24	
FINEDON																			21	21	
IRTHLINGBOROUGH	7					7	5													19	
KETTERING	23					41	34													95	
OUNDLE	6						14													20	
RAUNDS	6			2			6			1						1		1	1	18	
ROTHWELL	3					3	5	2						1	1					15	
RUSHDEN	18					42	15												60	135	
WELLINGBOROUGH																			180	180	
Combined Urban Districts	75	3		2		93	79	2		1				1	1	1		1	1	321	581
RURAL :—																					
BRACKLEY																			2	2	
BRIXWORTH						2	1													3	
CRICK	6																		20	26	
DAVENTRY	1				2	6	2	3	1	1										16	
EASTON-ON-THE HILL																				Not stated	
GRETTON	6																			6	
HARDINGSTONE	15																		39	54	
KETTERING	24																		25	49	
MIDDLETON CHENEY																				Nil	
NORTHAMPTON	6					86			14											106	
OUNDLE	25						2	1	5	1									2	36	
OXENDON	14						1	1											1	17	
POTTERS PURY										2				1						3	
THRAPSTON																			78	78	
TOWCESTER	27				2	6	2	1	3		2	1					1	2		47	
WELLINGBOROUGH	26					27	6												26	85	
Combined Rural Districts	150				4	127	14	6	23	4	2	1		1			1	2	3	190	528
ADMINISTRATIVE COUNTY	225	3		2	4	220	93	8	23	5	2	1		2	1	1	1	3	4	511	1,109

